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TO CALLERS AND TELEPHONERS

Until further notice our office hours are:—
Mondays to Fridays - 9.30 *a.m. till* 3.45 *p.m.*
The office will be closed on Saturdays

Retirement of Mr. Frank R. Potter

OF the former British railway companies, the Great Western was the least affected by grouping. It absorbed the South Wales lines and the docks, but it retained not only its name, but also its traditions and constitution, and in that respect it is unique among the railways, for on the G.W.R. alone many features have survived the great amalgamations of 1923. It is the only railway which retains the office of the Superintendent of the Line. On the other companies this function has been divided into the offices of Operating and Commercial Managers and so forth. It is now officially announced that the third holder of the office since grouping, Mr. Frank R. Potter, has resigned and will retire at the end of the year. As is well known to our readers he suffered a long and serious illness early in the year and although he returned to work some six months ago, he has for some time felt that he should retire and leave the way open to a younger man. Not only with his colleagues and the staff on the G.W.R., but also with his colleagues on other railways, we can say without fear of contradiction, there has never been a more popular railway officer. Both in personal appearance and in his honesty and straightforwardness he recalled to many his father, Mr. Frank Potter, who was General Manager from 1912 to 1919. The present Mr. Potter is the eighth Superintendent of the Line since that office was created in 1864, as will be seen from the following list:—

George Nugent Tyrrell	February, 1864—June, 1888
N. J. Burlinson	July, 1888—April, 1894
T. I. Allen	April, 1894—December, 1903
J. Morris	January, 1904—January, 1911
Charles Aldington	January, 1911—March, 1919
R. H. Nicholls	March, 1919—December, 1932
H. L. Wilkinson	January, 1933—July, 1936
Frank Potter	August, 1936—December, 1940
Gilbert Matthews	January, 1941—

Our readers will join with us in wishing Mr. Potter a long and happy retirement, and in giving a cordial welcome to his successor, Mr. Gilbert Matthews, who is taking office at one of the most difficult and critical times in British railway operation—these difficulties affect the G.W.R. more than the other lines because of the necessary diversion to western ports of so much of our wartime traffics.

* * * *

Signalmen and Others

Colonel Moore-Brabazon, in his speech at the Institute of Transport luncheon on December 4, paid a well-deserved tribute to a category of railwaymen which seems so far to have escaped the congratulations that members of the general public offer to the engineers whom they see at work repairing damaged lines and structures, and the astonishingly quick results of whose labours they do not fail to appreciate. The signalmen, however, to whom Colonel Moore-Brabazon made special reference, have a less conspicuous role; yet their coolness in carrying on their vital work uninterrupted under all conditions without a thought for themselves, even when bombs and fragments of burst anti-aircraft shells may be falling far too numerously and closely to be altogether comfortable, is beyond praise. These men, no less than engine drivers and firemen, platelayers, fitters, shunters, guards, station staff, and all the men whose essential work exposes them to danger, are worthy of the gratitude and admiration of the travelling public. Incidentally, perhaps, the members of the travelling public themselves deserve more appreciation for their stoic endurance of inevitable hardships than they generally receive—but that is rather like invoking the sentiments of a mutual admiration society, not perhaps a very helpful thing in time of war.

* * * *

New Railway Network Principles

Some years ago we published a letter from Mr. J. F. Pownall outlining a scheme intended to speed up and increase the frequency of cross-country travel. The basic principle was to establish "hour stations," between which expresses should run every hour, leaving one hour station at the precise hour, arriving at the next from five to ten minutes short of the hour, and leaving again towards the third at the precise hour. Stopping trains would do the hour section in 10 to 15 min. short of the two hours. Mr. Pownall has just issued a booklet (noticed on page 661) in which he gives a summary of his scheme, with a typical example covering the Midland and Eastern counties, with connections to Liverpool and South Wales. He establishes hour stations at Liverpool, Stoke-on-Trent, Newport, Cheltenham, Birmingham, Swindon, Watford, Nottingham, Peterborough, Northwood, Cambridge, Boston, Norwich, Mark's Tey, and Ipswich. The distances between these hour stations vary from 47½ to 67 miles. Thus a journey from, say, Nottingham to Newport would be *via* the two intermediate hour stations of Birmingham and Cheltenham, and would take three hours, less the 5 or 10 min. before the third hour of the arrival at Newport. From Cambridge to Liverpool the journey, *via* Woodford, Nottingham, and Stoke, would occupy all but four hours; and both these typical journeys

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could be accomplished after starting at any hour of the day. Mr. Pownall would not interfere with the existing main lines, and his network would use to a large extent existing railways, with a few new connecting lines. He advocates various additional improvements, which, however, need not be considered in an examination of the principles of his scheme. Hitherto the scheme could hardly be expected to receive serious consideration in view of the fact that it takes no account of variations in traffic requirements, and would, therefore, presumably entail a great deal of almost empty train mileage in many parts. With the prospect of vast changes due to destruction and to redistribution of the population which may come about after the war, the scheme is certainly worth considering now as a possibility.

* * * *

Quiz

American railway enterprise is again illustrated in the compilation and publication of the very striking catechism entitled "Quiz on Railroads and Railroading," reviewed on page 661. We all know the man or woman, who, because we have some connection with railways, delights to assail us with a multiplicity of conundrums on that subject, which is, at times, baffling, but many of these queries are backed by a genuine desire for knowledge of the intricacies and difficulties of this great industry. There is, therefore, much to be said in favour of assuaging this thirst for information by publishing, in most attractive form, no fewer than 400 likely questions and answers covering every phase of railway operation, history, and general information, as a means of stimulating a wider-spread public interest in the subject. The artistic and attractive cover of "Quiz" can hardly fail to catch the eye of the most disinterested member of the public, and its excellent illustrations further whet his or her appetite for the feast of information contained in the text. When peace returns, railway administrations in other countries might well follow the example of the Association of American Railroads by producing a brochure on similar lines to suit their particular undertakings.

* * * *

Benguela Railway

The Benguela Railway Company operates the railway of 1,347 km. (837 miles) from Lobito Bay to the eastern frontier of Angola, Portuguese West Africa, and its principal revenue is derived from the output of the Katanga copper mines. The company is controlled by Tanganyika Concessions Limited, which holds 90 per cent. of the capital and all the income debentures. The remaining 10 per cent. of the capital is held by the Portuguese Government. Results for the year 1939 compared with those of 1938 as follow:—

	1938	1939
Passengers, number	195,694	202,785
Goods and minerals, metric tons	324,339	321,722
Operating ratio, per cent.	56·39	62·22
	£	£
Operating receipts	361,113	366,228
Operating expenditure	203,626	227,839

After deducting Lisbon and London expenses and crediting £65,000 to renewal reserve account, the excess of receipts over expenditure was £50,779, and this amount was set aside for redemption of debentures. Passengers increased by 3½ per cent. but in freight traffic an increase in inter national and local business was more than offset by a fall of 6,604 tons in minerals. The increase in operating expenses was accounted for by heavier repairs to rolling stock and higher cost of maintenance of the line. Net receipts for the first nine months of 1940 show an increase of £3,299.

* * * *

New American Streamliners

Throughout railway history the development of higher standards of speed in one part of any given country has seldom failed to influence speed over the remainder. This is certainly so at present in the United States, where the widespread extension of air transport and fast long-distance motorcoach services has provided an additional incentive to faster railway schedules and more attractive accommodation. The prolific crop of high-speed transport between the Eastern States, the cities of the Middle West, and the Californian coast is now spreading rapidly to the south and south-west of the U.S.A.; and the vogue of the "all-coach" luxury streamliner, with its democratic appeal, is extending at the same time. Next of the American lines to make its diesel *début* is to be the Southern Railway, with an ambitious programme which has required the building of six streamlined trains; in conjunction with the Pennsylvania and Norfolk & Western companies, these will operate a daily all-coach service between New York and New Orleans, leaving New York about 4.30 p.m., and reaching New Orleans at 7.45 p.m. next day, together with a new service between Washington and Memphis. Other recently inaugurated diesel services—not all of a high-speed description, but all cutting very substantially below the previous fastest times—are the Southern Belle of the Kansas City Southern and Louisiana & Arkansas companies, between Kansas City and New Orleans; and an additional Rock Island Rocket—the Choctaw Rocket—between Memphis and Amarillo. The all-coach Silver Meteor of the Seaboard Air Line, running between New York and Miami, has proved so popular that this winter its formation is increased from the original 7 to 14 cars; and the same company's all-Pullman Orange Blossom is being duplicated daily, one section for the east coast, and the other for the west coast Floridan resorts.

* * * *

Co-operative Streamline Enterprise in U.S.A.

A remarkable example of co-operation is provided by the high speed train service introduced this month between Chicago and the coast resorts of Florida. Three streamline trains are being put into operation—the South Wind by the Pennsylvania Railroad, the City of Miami by the Illinois Central System, and the Dixie Streamliner by the Florida East Coast Railway. The round trip from Chicago to Miami and back takes 61¼ hr., so that each flyer runs once in every three days in each direction; but by agreement between the companies concerned, the services are so arranged as to give a daily departure from Chicago at 9.40 a.m. Central time, and a daily arrival in Miami at 4.10 p.m., Eastern time, the following afternoon, with a return at 6.25 p.m., reaching Chicago at 10.55 p.m. a day later. The running time is thus standardised at 29½ hr. in each direction, though three different routes will be followed. The South Wind will travel from Chicago over the metals of the Pennsylvania and Louisville & Nashville lines; the City of Miami by the Illinois Central and the Central of Georgia; and the Dixie Streamliner by the Chicago & East Illinois, Louisville & Nashville, Nashville Chattanooga & St. Louis, and Atlanta Birmingham & Coast; all three will obtain access to Miami over the Atlantic Coast and Florida East Coast lines. Ten railways are thus concerned in the admirable example of communal enterprise, which will give daily high speed service between the terminals, and at the same time afford facilities every third day to and from cities spread over a considerable range of country between Chicago and the Floridan coast.

* * * *

Telephone Train Dispatching in the U.S.A.

It was recently announced at the annual convention of the telegraph and telephone section of the Association of American Railroads at Ottawa that the telephone was now used for train dispatching on 148,248 miles of line in the U.S.A., leaving only 75,107 miles still equipped with the Morse telegraph. Apart from a few small trials on inter-urban lines, dispatching by telephone appears to have been first tried on the New York Central and Burlington lines in 1907, but it rapidly gained support and by December, 1908, nearly 7,000 route-miles of line were being so worked. With the telegraph, only skilled Morse operators could be employed as dispatchers and when legislation enforcing shorter working hours came into force the railways experienced some difficulty in finding the additional trained men required. The telephone completely altered the situation and proved safer and more reliable. Telephone engineers soon produced several designs of selective ringing equipment specially suited to dispatching, several of which have found wide application, not only in America, but in other continents. In Europe they have been used for the traffic control systems which function somewhat differently from the American dispatching.

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Train Services and the War

COMPARISON of the effect on passenger train services in Great Britain of the 1914-1919 war with what has happened during the first fifteen months of the present war, as set out in a detailed analysis on p. 664, is a matter of considerable interest. All the changes from August, 1914, were made gradually; up to the end of 1915, indeed, relatively little of withdrawal or deceleration had taken place. But from then onwards there was an unceasing worsening of service, until by the summer of 1918 great reductions in the frequency of the trains had been accompanied by the entire disappearance of restaurant cars—except a few workings still retained on the Midland and Great Central Railways—and the substitution on many long-distance trains of non-corridor for corridor stock. Over previously competitive routes, also, passengers no longer had any option as to the routes by which they might travel; the morning service from London to Scotland, for example, was given from King's Cross and the afternoon train ran from Euston. In this war, however, the course of train service development until now has been in exactly the opposite direction. From September 25, 1939, long-distance services came into operation which in most cases were slower and more infrequent than those of October, 1918, and although modern motive power made it unnecessary to dispense with corridor stock, all restaurant cars were withdrawn. The mile-a-minute standards of speed that had been general up to the onset of war gave place to a maximum start-to-stop average of 45 m.p.h., and the change was all the more drastic in that it was made at one stroke from a standard far higher than that of 1914, which it took four years to reduce to the war service of 1918.

The reason given for these extreme measures was the expectation of severe damage to the railway systems by bombing raids. When in the early months of the war such raids did not eventuate, prompt steps were taken to improve long-distance travel facilities, and new timetables, dating from December 4, 1939, on the L.N.E.R., January 1, 1940, on the L.M.S.R. and S.R., and February 5, 1940, on the G.W.R., brought into operation many more trains, start-to-stop speeds up to 50 m.p.h., and showed a reinstatement of restaurant cars on all principal expresses. Since then there have been three major developments affecting British train services. The first was the coal position after the exceptional weather hold-up of January and February, 1940, which made it necessary for the L.N.E.R. from February 26, 1940, to withdraw a number of its long-distance expresses, as well as all its semi-fast trains between King's Cross and Doncaster, and to group the remaining trains together in such a way as to free the Great Northern main line to the maximum possible degree for coal trains and returning empties. The second was evacuation, which fell particularly heavily on the G.W.R., and early in June caused that company to cancel various long-distance trains. In succeeding months the position was to some extent restored, on the L.N.E.R. by duplication from April 15 of all the principal services between King's Cross and Newcastle, and on the G.W.R. by the restoration from July 5 of certain of the services withdrawn. The new timetables introduced on October 28 show these improvements as permanent, and though they do not fully reinstate the service which operated in the first months of 1940, the L.N.E.R. main-line services to and from King's Cross, as set out in detail in the November 8 instalment of "Transport Services and the War," are at least a substantial improvement on those in force during the summer of 1940. On the L.M.S.R. and S.R., however, apart from a few cancellations by the latter company of Kent Coast residential expresses and late evening trains, the services introduced in January, 1940, remain practically unchanged. Further, on all the four main-line railways, as set out on p. 548 of "Transport Services and the War" in our November 22 issue, there has been a continuous increase during 1940 in the number of trains to which restaurant, buffet, and Pullman cars are attached.

These last-mentioned facts are the more remarkable seeing that from early in August the third major development affecting operation—widespread enemy air raids—have become accomplished fact. Nevertheless, despite this third and serious handicap the railways are not merely able to maintain reasonably fast, frequent and comfortable long-distance train services, but even in some respects to improve them. In this connection, however, there is one important qualification that must be made. It is inevitable that disturbance of train running by reduced speed during long night "alerts," and shorter ones during the daytime, not to mention diversions and engineering slacks caused by damaged tracks, should have adverse effects on punctuality. But those who have to travel widely can hardly fail to notice that these effects on the operation of different main lines vary very considerably. Over one important main line in particular, even during a day that may be practically free from raid warnings, long-distance trains may seldom reach their destinations less than 1½ to 2 hr. late; another, no less hampered, will succeed in cutting its loss of time down to ½ hr. or less. It is a matter for congratulation that in a modern war, waged under so-called *Blitzkrieg* conditions, a train service can still be tabled, after fifteen months of conflict, of such amplitude and comfort and, nominally at least, of quite tolerable speed. It will be a triumph if the railways so can cope with their present handicaps as to be able, at least in the hours of broad daylight, to offer the traveller some adherence to their published times.

* * * *

U.S.A. Railways Wagon Replacements

THE Car Service Division of the Association of American Railroads has recommended that railways in the United States should buy 100,000 new wagons during the twelve months to September 30, 1941. As was recorded in THE RAILWAY GAZETTE of November 8, the recommendation is based on a recent survey of prospective equipment needs of the railways in the light of possible demands both from ordinary commercial sources and the expanding national defence programme. The Car Service Division concluded that the railways should have, by the beginning of October next year, a minimum of 1,680,000 wagons of which at least 94 per cent. or 1,579,200 should be in good working condition on September 15 last. The number of wagons owned by the United States railways was 1,641,087, but of these 136,473 or about 8·3 per cent. were not in operation condition. This left a total of 1,504,614 wagons available for operation, which would be about 75,000 less than the Car Service Division estimates as the minimum requirements a year hence. Further, during the coming twelve months many thousands of old wagons will fall to be retired from service in the normal course of operations, and this will necessitate buying additional wagons to bring the total ownership up to the stipulated minimum of 1,680,000. The division analysed the needs of every railway and made recommendations as to what railways should secure additional wagons and the classes of wagons required.

The programme of wagon purchases is by far the biggest to be undertaken by the American railways for many years. So far in 1940 nearly 35,000 wagons have been ordered and the total in 1939 was 54,160; in the previous year it was but 16,370. The highest number of wagons ordered in any recent year was in 1936 when about 69,700 wagons were purchased. In 1932 and 1933 fewer than 2,000 cars each year were bought. In 1929, when industrial and commercial activity was at its height, no fewer than 110,140 wagons were ordered; but in the next year purchases had fallen to 43,300, and in 1931 they were only 10,200. Although the 1929 figure was by far the greatest in anything approaching normal conditions, it was considerably below the 1922 total when 178,200 wagons were ordered as a result of endeavours by the railways to rehabilitate their rolling stock after the wear and tear occasioned during the war of 1914-19. Compared with the end of 1918, at which time there was reflected the building up of wagon fleets resulting from war needs, the present freight wagon capacity is considerably lower. There were 30 per cent. fewer cars on Class I railway lines at the end of 1939 than 21 years earlier, but because of increased capacity a unit the total carrying capacity had fallen by about 15 per cent. The actual load for each car in 1939 was less than in 1918, suggesting that no great use had been made of the increased carrying capacity. This deficiency was partly offset by an increase in wagon speed by some 70 per cent.

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THE SCRAP HEAP

"The Railway Station"

One of the most successful and most admired works of the eminent British artist and Royal Academician, William Powell Frith (1819-1909) is his picture called "The Railway Station," depicting Paddington. He appears to have been encouraged to consider producing it by the popularity gained with his picture "The Derby Day," which is in the National Gallery. Frith began the preliminary work in the autumn of 1860 and the picture was finished in March, 1862. L. V. Flatow, an art dealer in London, agreed to purchase it for £4,500, and later offered £750 more for the right (hitherto reserved by Frith) of showing at the Royal Academy. In his autobiography the artist gives some interesting information about the progress of the work. "I don't think," he says, "the station at Paddington can be called picturesque, nor can the clothes of the ordinary traveller be said to offer much attraction to the painter; in short, the difficulties of the subject were very great and many were the warnings of my friends that I should only be courting failure if I persevered in trying to paint that which is in no sense pictorial. My own doubts were great, I confess, and

W. P. Frith's famous painting "The Railway Station" depicting Paddington in 1862. The original is in the gallery of the Royal Holloway College, London University

"ON THE LINE."
(With Apologies to Mr. W. P. FRITH, R.A.)

A political cartoon of 1885 based on Frith's famous picture

I well remember my surprise—on showing the sketch to the great Flatow—at the eagerness with which he engaged himself to take the picture, sketch and copyright, at a price that appeared to me to be one of the most exorbitant on record."

Frith's diary for 1861 records that he was doubtful of himself and damped by the indifference of artist friends, but he worked steadily all through that year, employing a multitude of models. "I fear there is little to tell," he records, "that would interest my readers, but I desire to reiterate, for the information of young painters, that every object, living or dead, was painted from nature—often imperfectly enough, as the picture proves. The police officers represented as arresting a criminal on the eve of escape, were painted from two detectives well known at the time, Messrs. Haydon and Brett. . . . They were admirable sitters. . . . They took small credit for doing for me what they had often done for criminals of a deeper dye, namely, standing on the watch, hour after hour . . .

"One of the incidents in the picture represents a foreigner whose idea of a cab fare differs considerably from that of the driver of the vehicle, and he is consequently subjected to a bullying not uncommon under similar circumstances. The original of the foreigner was a mysterious individual who taught my daughters Italian; he hailed from Venice, at that time groaning under Austrian rule. He was a man of distinguished manners; and we were given to understand that he was a nobleman whose head was wanted in Venice to serve a very different purpose from that to which I put it in this country. At first he refused to sit, as he dreaded recognition by some aristocratic friends who might come to England; and it was only on my promising that I would avoid making a likeness of him that I succeeded in overcoming his reluctance. . . . I deceived the Italian count from the first. . . . The difficulty was to prevent the portrait being seen till it was finished; this was accomplished on one pretence or other; but the inevitable moment came at last and never can I forget the torrent of broken English that was poured upon me when my sitter first saw his face in the picture. 'You say it shall not be like me, and it is as if I see me in a look-glass. You have betray me—it is perfide—my friends will recognise me. If I thought it was to be so I would not have do it'."

Frith relates that the picture was "a great success. I find that 21,150 people paid for admission in seven weeks and the subscription for the engraving was equally surprising and satisfactory. The critics contradicted one another, as usual, without doing good or harm to me or the picture."

The cartoon of Frith's remarkable work, which we reproduce herewith, shows Bismarck as the central figure, with John Bull as the aggrieved cabman, disputing over a political deal he seeks to effect with the "honest broker" of Europe. Gladstone is seen being arrested, to the evident satisfaction of Lord Salisbury, while many other prominent figures of the day, including Queen Victoria and William II of Germany, Parnell, Labouchere, Irving, etc., also appear. "Miss Propriety" is seen embracing W. T. Stead. The general appearance of Paddington station and the old style of G.W.R. train is retained but the wording of some of the advertisements seems to indicate that Holborn Viaduct was in the draughtman's mind. There is an advertisement for Messrs. Findlater, at whose premises in London Bridge station approach we noticed the cartoon, and who kindly allowed us to have it for reproduction.

PUBLICATIONS RECEIVED

Daily Mail Year Book, 1941. London: Associated Newspapers Limited, Carmelite House, E.C.3. 5 in. × 7¼ in. 228 pp. Price 1s. 3d. net.—The latest issue of this valuable reference book covers all the personalities and events of recent times. As always, it provides a concise summary of developments both at home and abroad, and within this pocket-size volume is to be found a wealth of detail which normally would call for provision of a number of larger works of reference. Despite wartime conditions, it has been kept remarkably up-to-date in its contents. On this occasion less space has been devoted to railways than in some former years, but such statistics as accidents and a brief summary of improvements within the London area are recorded.

Quiz on Railroads and Railroading: A Catechism of 400 Questions and Answers. Washington, D.C.: Association of American Railroads, Transportation Building. 34 pp. Illustrated. 10½ in. × 7½ in.—By reason of its artistic and, at the same time, interesting cover, this brochure is at once arresting, and its contents provide a wealth of facts about the American railway industry, its organisation, history, extent, finances, and general accomplishments. As the foreword explains, it is dedicated to the curiosity of the American people, who every hour of every day ply railwaymen with such queries as "Quiz" answers. The questions vary from mileage statistics to permanent way standards and general information, and, from summit altitudes to bridges, tunnels, right of way, electrification, rolling stock, locomotives, timetables, mail service, freight and passenger services and operation, organisation and personnel, investment and finances generally, taxation, history and many other miscellaneous subjects. Some of the more striking illustrations depict streamline trains, a classification yard, mechanical track maintenance, big bridges, traffic control, and interiors of trains. The whole forms a most valuable contribution to railway literature and supplies a wealth of information both concisely and attractively.

History of the Port of Cardiff. By Edgar L. Chappell. Cardiff: Priory Press Limited, The Friary. 9¾ in. × 6 in. 135 pp + xxxviii plates. Price 3s. 6d. (stiff paper covers) and 5s. (cloth covers).—The author of this book is a local alderman, and he has taken far more than a passing interest in the development and early years of the important industrial area which he represents. The volume was produced in connection with the Docks Centenary Celebrations of last year, but it is of far more than passing interest. Within a comparatively small compass Mr. Chappell has dealt authoritatively and well with Cardiff, its industries, and its transport, from pre-Roman days up to the present time. Of particular interest to railway readers are the chapters on the Glamorgan Canal; the Taff Vale Railway; the Rhymney Railway; the South Wales Railway (G.W.R.); and the Barry Railway. A useful chronological review and an adequate index complete an interesting and useful historical work of reference.

New Railway Network Principles. By J. F. Pownall. Birmingham, 4: Cotterell & Co., 110, Dale End. 24 pp. Price 2s.—This booklet, describing the principles of Mr. Pownall's scheme of a network of "hour-section" railways all over the country (which he briefly outlined in a letter to THE RAILWAY GAZETTE of March 16, 1934 (p. 450)), is perhaps timely, not so much because of its present practicability as because, when the war is over, such drastic reconstruction may be necessary as to make his proposals for more rapid and frequent cross-country travel easier to adoption and in greater demand than hitherto. We refer to the matter editorially on page 657.

Grafton & Co.'s Catalogue.—The periodical production of catalogues second-hand books by this well-known dealer, who still operates from 51, Great Russell Street, London, W.C.1, often results in the publication of some piece of historical information that has not hitherto been generally known. The current catalogue, No. 222, which is now before us, includes, for example, details of three Acts of Parliament of 1746 relating to the repair of roads in the counties of Durham and Northumberland in which rights are reserved to colliery owners to make and use waggonways across the roads. Two further Acts of 1749 contain similar provisions. These Acts are possibly the earliest Parliamentary references to railways.

XUM

OVERSEAS RAILWAY AFFAIRS

(From our special correspondents)

ARGENTINA

Railways Petition for Higher Tariffs

The Chairman of the Board of Railway Representatives and Managers, Dr. Angel Sánchez Elía, has addressed a communication to the Ministry of Public Works, again calling the attention of the Government to the precarious financial situation of the railways, and soliciting an increase of 5 per cent. on the existing tariffs for passenger, goods, and parcels traffic. In stressing the urgency for immediate action if the companies were to continue their normal operation, the note pointed out that at present many of the foreign-owned lines were totally unable to meet the interest charges on their debentures—in parenthesis it may be mentioned that for the first time in its history, the Central Argentine Railway has been obliged to ask for a moratorium on its debentures—and the majority of the companies found it impossible to defray their working expenses out of current earnings.

Net Receipts 30 and 89 per cent. Lower

The note stated that during the first six months of 1940, the net receipts were 30 per cent. below those for the corresponding period of 1939. During this period the gross receipts had dropped from $220,063,715 to $197,409,707. Working expenses, by the exercise of the most drastic economies, had been reduced from $155,339,386 to $151,081,980. The net receipts during the first six months of the current year were therefore $46,327,727, as compared with $64,724,329 in the first half of 1939, a decrease of $18,396,602.

From July onwards the situation had become much worse, due to the fact that maize shipments, which normally provide the railways with one of their most lucrative sources of traffic, had virtually come to a stand-still. The gross receipts for the first three months of the current financial year amounted to only $80,333,853, as compared with $94,436,038 in the corresponding period of 1939. On the other hand, working expenses had increased from $77,265,874 for the corresponding quarter of 1939 to $78,464,031 for the first three months of 1940. Thus, the aggregate net receipts of all the privately-owned railways during the first quarter of the current financial year amounted to only $1,869,822, as compared with $17,170,164 in 1939-40, a fall of virtually 90 per cent.

A Moderate Demand

In view of the gravity of the situation, as clearly demonstrated by the foregoing figures, the companies' request for a slight increase in the tariffs, which—as the note pointed out, was merely to enable them to cover working expenses—could not be regarded as excessive. On the contrary, as compared with the tariff increases recently put into force on the railways of some of the neighbouring republics, it was extremely moderate. For example, on the Chilean State Railways, the fares and rates had been raised by 20 per cent. On the Uruguayan railways they have been increased by 10 per cent., and several of the Brazilian lines were receiving financial aid from the Government, to enable them to tide over their economic difficulties.

Institute of Transport Meeting

A meeting of the Argentine and River Plate Centre of the Institute of Transport was held in Buenos Aires on September 24, at which Sir Robert Burton Chadwick, Bart., was the guest-lecturer, and gave an interesting address on "The British Mercantile Marine," with special reference to its influence on the development of the national overseas trade and the growth and expansion of the British Empire.

UNITED STATES

Coast-to-Coast Tours to Continue

The "grand circle" coast-to-coast tours at greatly reduced fares, introduced in connection with the World's Fairs in New York and Chicago, are to be continued until October 31, 1941. It will be remembered that they enable a passenger to start from his home, or any other point, visit both the sea coasts by a wide choice of routes and return by the same or another route. The fares are $90 in coaches and $135 in Pullmans, plus charges for sleeping or parlour car space occupied. The Pullman company's specially low charges are $45 for a lower or $34·50 for an upper berth. It is thus possible to travel 8,400 miles through 27 States at these costs. Provided the tour is completed within 60 days any number of breaks of journey may be made in either the outward or return direction.

RHODESIA

Partitioned Trucks for Pigs

The Rhodesia Railways are experimenting with the use of four-wheel livestock trucks divided into five compartments for the conveyance of small lots of pigs, thus saving the farmer the cost and trouble of providing crates for the carriage of individual animals. In addition, it is hoped to encourage co-operation between neighbouring producers who, by prior arrangement with the local stationmaster, can fix a mutual loading day so that a fitted truck can be obtained and some reduction in transport charges achieved. The capacity of the fitted type of truck varies according to the size of the pigs but, on an average, the five compartments will hold six or seven baconers each. The consignments must be prepaid and despatched to one destination, though they may be to more than one consignee provided the pigs bear some mark of identification. Initially, there will be two of these partitioned trucks, one stationed at Bulawayo and the other at Salisbury, at both of which towns bacon factories are situated.

Anti-Malarial Work

Sir Malcolm Watson, Director of the Ross Institute, has recently described the good work carried out by the Rhodesia Railways to prevent malaria at Victoria Falls. As some persons contracted malaria after visiting the falls and attributed it to their visits, the Rhodesia Railways, which manage the hotel at this beauty spot, requested Sir Malcolm Watson in 1932 to give advice in the matter. People living in the hotel, which is thoroughly mosquito proof, ran little or no danger, but other visitors who camped out on the banks of the river ran considerable danger of getting malaria. Sir Malcolm then recommended that no one should be allowed to live close to the river and this recommendation was adopted by the railway company, which removed its native employees from the vicinity of the river; meanwhile the Southern Rhodesia Government built an attractive model village for its local employees more than a mile from the Zambesi. This eliminated any possible danger of malaria spreading from the natives to Europeans staying in the hotel or in the camping ground set aside on a healthy site. The river bank was cleared of thick undergrowth and the Rain Forest was drained in such a way as to enhance rather than detract from the beauty of this natural wonder. On a subsequent visit to Rhodesia, Sir Malcolm had an opportunity to examine for himself the efficient manner in which the anti-malarial work had been carried out at Victoria Falls by the railways.

NEW ZEALAND

Road Transport Fuel Economies

Conservation of oil fuel was one of the first steps taken by the New Zealand Government in its measures to place the Dominion's economy on a wartime footing. The restrictions were applied to all classes of road users, private, commercial, and state-owned services, including the Railways Department, the largest operator of road vehicles in New Zealand. In its endeavours to maintain various passenger and goods road services on reduced fuel allowances, the department equipped several of its service cars and buses with producer gas plants of a type specially evolved for such use. These experimental units, which weigh 6 cwt. when fully charged with fuel and water, have proved so satisfactory that it has now been decided to equip similarly 40 passenger vehicles

with plants made at the department's workshops at Woburn. Besides relieving the demand on fuel oil stocks, these gas-producing installations will enable existing services to be continued at much lower operating costs than hitherto.

CHINA

Reported Second Demolition of Chien Tang Bridge

Reports from the fighting areas are somewhat confused, but it appears that the recently-repaired Chien Tang bridge, just south of Hangchow on the Shanghai—Hangchow—Ningpo Railway, has again been destroyed by the Chinese. [Its repair was recorded in our issue of December 20 last—ED., *R.G.*]. This report appears in the *National Herald* and says that since the occupation by the Japanese of Siaoshan—the only strong foothold gained by the Japanese in eastern Chekiang and on the southern bank of the Chien Tang river, opposite Hangchow—the Japanese have been transporting supplies to their forces in the occupied eastern Chekiang district by means of the Chien Tang bridge which they repaired. This bridge communication at once became and continued to be a threat to the Chinese army until September 2, when it was blown up by them. The task was carried out by a dare-to-die corps transported to the vicinity of the bridge in two boats, late in evening, during heavy rain. Most of the soldiers who formed the corps were blown to pieces, it is admitted, but the bridge was completely destroyed.

It will be remembered that this bridge was built by Dorman Long & Co. Ltd. and was opened only just in time to be demolished by the retreating Chinese when hostilities in that area began. Its history of building, demolition, rebuilding and second destruction is, therefore, remarkable if not unique for so great a structure.

Chinese Constantly Wrecking Japanese Controlled Lines

Land mines and other forms of demolition are now causing the Japanese-managed railways so much trouble that traffic on the Shanghai—Hangchow line is again interrupted almost as soon as the track has been restored and traffic resumed. On the Tientsin—Pukow Railway all trains are at present being run at 8 m.p.h. to prevent serious accident if they are wrecked by guerillas or by the Chinese 8th Route Army, which is systematically operating against the entire Japanese-controlled railway system, despite its being heavily guarded and patrolled.

New East-West Line Opened

An important new 150-mile east-west cross connection between Shihkiachwang to Tehchow has been opened for traffic. This not only forms a link between the Tientsin—Pukow and Peiping—Hankow lines, but provides direct communication between Taiyuan and the surrounding province of Shansi—of which that city is the capital—and the port of Tsingtao on the Yellow Sea, and this new through rate also passes through Tsinan, capital of Shantung. Shihkiachwang is some 180 miles south-west of Peiping, and is the junction for the branch from the Peiping—Hankow line leading to Taiyuan. Tehchow is about 100 miles north of Tsinan on the main line from Shanghai and Nanking to Peiping.

The Chinese intended to build a cross connection between Shihkiachwang and the Tientsin—Pukow line at Tsongchow, but Japanese controlling interests, by promoting the construction of the new link, have diverted the Shansi traffic to Tsingtao, a port in which they have for long been keenly interested. They captured it from the Germans in the 1914-19 war, and, though they handed it back to China afterwards, their trade has subsequently predominated there, and they have been closely concerned with the Tsinan—Tsingtao Railway, now the easternmost section of the new through route.

SWITZERLAND

New Works and Rolling Stock

The Swiss Federal Railways intend to spend fr. 25,000,000 in 1941 on new works and improvements and rolling stock. The most important new works are the loop line to connect the Cornavin and Eaux-Vives stations in Geneva, the doubling of a number of short sections, ranging from 4 to 15 km. in length, on the Gothard line, the Simplon line, the Neuchâtel-Lausanne line, the Zurich-Chur line and other lines in the Zurich district, and the electrification of some 80 route miles. The principal items in the rolling stock programme are 20 new coaches and 200 goods wagons.

Electrification

The new lines in the electrification programme are :—

(i) The Lucerne-Meiringen-Interlaken line through the Brünig Pass, 74 km. (46 miles).

(ii) The section Auvernier junction to the French frontier, of the Neuchâtel-Pontarlier line, 34 km. (21 miles) in length. The Neuchâtel-Auvernier junction section is part of the Neuchâtel-Lausanne line and already electrified.

(iii) The Zurich Oerlikon-Wettingen line *via* Regensdorf, 21 km. (13 miles) in length. The direct route from Zurich to Wettingen is already electrically operated, and this section brings the complete electrification of the lines round Zurich a step nearer.

SWEDEN

State Railways New Works

The State Railways have included in their estimates for the fiscal year 1941–42 new works costing Kr. 59,000,000 (about £3,500,000). The most important of these works are an extension of Göteborg station and yard, the electrification of the Langsele—Boden section, the doubling of the Flen—Cathrineholm section, 23½ km. (14¾ miles) on the Stockholm—Hallsberg main line, and of the Laxa—Gardsjo section, 22·9 km. (14¼ miles) on the Hallsberg—Falköping—Goteborg main line. Both these lines are electrified, and the new doubling works will bring the length of continuous double track on the former up to 140 km. (87½ miles) from Stockholm; the other double track section will be an extension of an existing short double-track length on an otherwise single line. Other items of expenditure provide for permanent way strengthening, new rolling stock, and a new ferry boat for the Malmö—Copenhagen service.

DENMARK

New Danish-German Through Route

The State Railways, under the supervision of the German occupation authorities, have completed the project for a new main line, 37 km. (23 miles) in length between Nykøbing on the island of Falster, and the port of Rodby on the island of Lolland, on the shore of the Femern Sund, which together with a new ferry service to be run between Rødby and the mainland of Schlesswig, and some extensions to the German lines should bring Hamburg within a 5 hr. journey from Copenhagen ; the time taken now is nearly twice as long. The costs of the various works entailed are estimated at Kr. 28,000,000 (£16,500,000), and include a large figure for a new bridge to connect the two islands outside Nykøbing. The construction of the line is expected to take at least three years. There is at present a private company's line on the island of Lolland from Nykøbing to Rødby *via* Maribe, 45 km. in length, but the new direct line is not to use any section of this existing railway.

FEDERATED MALAY STATES

Remarkable Increase in Revenue

The total revenue of the Government Railways from all sources from January to September, 1940, was £1,693,426 compared with £1,253,451 for the corresponding period in 1939, a very substantial improvement of nearly 30 per cent. Revenue for the months of August and September increased from £308,422 in 1939 to £393,602 in 1940.

During these months nine new locomotives of the 4.6.2-type "O" class with 12-ton axle load, were placed in service. These locomotives have been named after Malayan estuaries, namely :—

No. 77.	*Kuala Kenering*
No. 78.	*Kuala Kurau*
No. 79.	*Kuala Kangsar*
No. 80.	*Kuala Parit*
No. 81.	*Kuala Dipang*
No. 82.	*Kuala Pilah*
No. 83.	*Kuala Sawah*
No. 84.	*Kuala Klawang*
No. 85.	*Kuala Jelai*

The erection of a further two "O" class engines is awaited to complete the programme of 11 of this class for the year.

XUM

BRITISH WARTIME TRAIN SERVICES

A summary of the frequency and speed of the winter long-distance train services in Great Britain, introduced on October 28, compared with the war emergency services of October 1939, and the improved services introduced early in 1940

THE introduction by the four main-line companies of new timetables on October 28 makes a suitable occasion for reviewing the developments in speed and frequency of long-distance service that have taken place during fifteen months of war. Reviews were given in the September 29, October 6, 13, and 20, 1939, issues of THE RAILWAY GAZETTE of the first war emergency timetables, which embodied very drastic reductions in the frequency of the trains and no point-to-point schedule timed from start to stop at more than 45 m.p.h. Later in that year a number of additional trains appeared; and new timetables, operating on the L.N.E.R. from December 4, 1939, on the L.M.S.R. and S.R. from January 1, 1940, and on the G.W.R. from February 5, 1940, with numerous reinstated trains and speeds up to 50 m.p.h. from start to stop, were similarly reviewed in the February 23, 1940, issue of THE RAILWAY GAZETTE. The accompanying table carries one stage further the comparison of train services given in a similar table on p. 253 of the issue last-mentioned. It sets out the facilities offered between London and ten representative cities or towns on each of the four main-line railways, including the fastest journey time, the number of express trains daily, and their average journey time. The periods so compared are the last months of the 1914-1919 war, October, 1938 (the full normal winter service immediately before the present war), October, 1939 (the first emergency service of the present war), February, 1940 (after all the groups had brought their improved war services into operation), and November, 1940. It should be remembered, of course, that the 1918 speed and frequency were the product of more than three years of attrition and slowing down of a service which, in 1914, was on most routes considerably inferior to the peacetime service developed by the winter of 1938, whereas the present facilities are separated by but little more than a single year from the speed and frequency that had become standard before the present war began. On the other hand, the operating conditions in Great Britain in the present war have been much more difficult than in the last, owing to ceaseless aerial attack from August onwards; it was, indeed, the fear of what these conditions might be that caused the introduction at the beginning of the war of the drastically reduced and decelerated service from which the new timetables of December, 1939, January, 1940, and February, 1940, offered so welcome a recovery.

The most material worsenings of service in the present war are those between London and the Midlands, over the Midland Division of the L.M.S.R. and the Great Central section of the L.N.E.R. On the latter the best times between London, Nottingham, and Sheffield are respectively 40 and 38 min. slower even than in October, 1918, and the average

FASTEST AND AVERAGE TIMES AND FREQUENCY OF SERVICE BETWEEN LONDON AND VARIOUS PROVINCIAL CENTRES IN 1918, 1938, 1939, AND 1940

London and :—	Distance	Fastest Times					No. of Trains Daily					Average Times				
		Oct., 1918	Oct., 1938	Oct., 1939	Feb., 1940	Nov., 1940	Oct., 1918	Oct., 1938	Oct., 1939	Feb., 1940	Nov., 1940	Oct., 1918	Oct., 1938	Oct., 1939	Feb., 1940	Nov., 1940
L.M.S.R.	miles	h. m.	h. m.	h. m.	h. m.	h. m.						h. m.	h. m.	h. m.	h. m.	h. m.
Leicester	99·1	2 15	1 39	2 31	2 10	2 10	18	30	16	18	20	2 33	1 48	2 46	2 35	2 37
Birmingham	112·9	2 40	1 55	2 41	2 24	2 24	11	20	15	18	18	2 53	2 05	3 10	2 51	3 01
Nottingham	123·5	2 55	2 03	3 06	2 45	2 45	12	21	12	15	15	3 07	2 25	3 31	3 14	3 14
Sheffield	158·5	4 01	2 56	4 25	3 49	3 49	12	20	10	14	14	4 24	3 12	4 44	4 20	4 21
Manchester(*a*) ...	188·5	4 35	3 15	4 32	3 50	4 08	16	22	14	18	18	5 10	3 43	4 52	4 34	4 34
Liverpool	193·7	4 40	3 15	4 40	4 10	4 10	12	14	12	12	14	5 03	3 39	5 02	4 34	4 38
Leeds	196·0	4 47	3 48	5 35	4 44	4 44	12	16	8	12	12	5 25	4 06	6 03	5 27	5 28
Glasgow	401·4	9 30	*6 30	9 35	8 45	8 45	6	12	6	6	7	10 20	8 06	10 04	8 53	9 10
Perth	450·4	10 10	8 41	11 12	10 05	10 06	6	8	4	4	5	11 19	9 30	11 31	10 25	10 41
Inverness	568·4	15 55	13 00	16 14	14 22	14 26	3	4	2	2	3	16 28	14 30	16 26	14 56	15 32
L.N.E.R.																
Cambridge	55·7	1 19	1 05	1 33	1 26	1 22	15	40	16	24	24	1 34	1 20	1 43	1 42	1 41
Peterborough	76·4	1 38	1 16	1 42	1 32	1 33	22	30	18	27	26	1 50	1 30	1 50	1 36	1 37
Norwich	115·0	2 52	2 10	3 18	2 50	2 38	14	18	12	15	14	3 42	2 50	3 26	3 20	3 15
Nottingham (*b*) ...	126·5	2 27	2 16	3 17	3 07	3 07	16	18	12	14	16	2 57	2 38	3 36	3 22	3 30
Sheffield (*b*)	164·7	3 22	3 00	4 27	3 50	4 00	14	21	14	15	15	4 02	3 29	5 12	4 20	4 21
Leeds	185·8	4 32	*2 43	4 28	4 20	4 16	10	18	8	12	12	4 52	3 37	5 00	4 39	4 40
Hull	196·9	4 55	3 30	5 20	4 35	4 35	10	14	5	14	12	5 29	4 06	5 32	5 06	5 15
Newcastle	268·3	5 55	*3 57	6 31	5 39	5 45	12	21	12	13	16	6 40	5 15	6 56	6 04	6 02
Edinburgh	392·7	9 40	*6 00	9 40	8 25	8 30	8	15	8	9	9	9 52	7 46	10 08	8 57	9 03
Aberdeen	523·6	13 30	†9 45	13 45	12 21	12 20	5	12	5	8	8	15 04	11 53	14 52	13 00	13 02
G.W.R.																
Oxford	63·5	1 18	1 00	1 28	1 25	1 25	14	26	20	26	26	1 30	1 20	1 39	1 42	1 45
Birmingham	110·6	2 30	2 00	2 33	2 28	2 30	10	14	8	11	10	2 46	2 05	2 51	2 33	2 34
Bristol	118·3	2 15	1 45	2 35	2 30	2 30	16	20	14	18	20	2 45	2 15	2 58	2 51	3 02
Worcester	120·4	3 06	2 10	3 06	2 53	2 53	8	12	8	10	9	3 41	2 37	3 20	3 17	3 15
Cardiff	145·1	3 10	2 41	3 15	3 03	3 07	10	14	8	12	11	3 23	2 55	3 23	3 16	3 26
Weymouth	168·8	3 45	3 07	4 08	4 08	4 10	6	12	9	9	10	4 22	3 59	4 51	4 43	4 48
Exeter	173·5	3 30	2 50	4 30	3 30	3 30	15	19	11	11	11	4 31	3 42	4 52	4 05	4 07
Swansea	190·9	4 35	3 57	4 40	4 30	4 30	10	14	9	12	10	5 07	4 08	4 57	4 40	4 49
Plymouth (N. Rd.) ...	225·5	5 00	4 05	5 45	4 51	4 55	8	12	9	10	10	5 39	4 44	6 26	5 33	5 15
Penzance	305·0	7 55	6 30	8 35	7 30	7 30	6	9	6	6	6	9 11	7 18	9 35	8 17	8 18
S.R.																
Brighton	50·9	1 15	1 00	1 00	1 00	1 00	34	100	46	53	48	1 30	1 09	1 11	1 11	1 11
Hastings (*c*)	62·4	1 48	1 32	1 38	1 38	1 40	25	50	22	22	26	2 27	1 52	1 59	1 57	1 59
Portsmouth (*d*) ...	73·6	2 12	1 30	1 37	1 37	1 37	24	45	40	40	38	2 53	1 38	1 58	1 58	1 58
Margate (*e*)	73·9	2 04	1 30	1 38	1 38	1 50	18	28	20	21	17	2 34	2 03	2 20	2 08	2 13
Dover	77·3	2 27	1 32	1 52	1 55	1 55	17	32	22	22	22	2 46	2 06	2 19	2 15	2 14
Southampton	79·2	1 43	1 25	1 46	1 35	1 35	20	28	20	20	20	2 16	1 50	2 03	1 59	1 57
Salisbury	83·8	1 43	1 26	1 48	1 42	1 43	15	26	16	17	21	2 15	2 02	2 08	2 04	2 02
Bournemouth	107·9	2 39	1 56	2 30	2 15	2 15	12	26	17	18	18	2 52	2 33	3 04	2 58	2 58
Exeter	171·8	3 57	3 09	3 50	3 38	3 38	11	13	9	11	11	4 38	3 42	4 15	4 09	4 09
Plymouth (N. Rd.) ...	230·9	5 55	4 43	6 06	5 52	5 53	8	12	7	9	9	6 32	5 45	6 22	6 17	6 19

(*a*) *Via* Western & Midland routes. (*b*) *Via* G.N. & G.C. routes. (*c*) *Via* Tonbridge & *via* Lewes. (*d*) *Via* L.S.W. & L.B.S.C. routes in 1918, *via* Guildford only in 1938, 1939, & 1940. (*e*) *Via* Canterbury only in 1918 ; *via* Ashford and Canterbury in 1938, 1939, & 1940. * By streamline train. † By streamline train between Edinburgh & London

times by both G.C. and G.N. routes are 33 and 19 min. slower. The average L.M.S.R. journey times between St. Pancras and Leicester, Nottingham, and Leeds are 4, 7, and 3 min. slower, and between Euston and Birmingham 8 min. slower, than in October, 1918. Other services worse than in 1918 are the G.W.R. between Paddington and Oxford, Bristol, and Weymouth; the fastest times are 7, 15, and 25 min. longer, and the average times 15, 17, and 26 min. longer respectively. On the L.N.E.R., Cambridge is 3 min. further away from London in fastest time, and 7 min. in average time, than at the end of the last war. The Southern Railway has the distinction that no fastest journey times in this table are slower than in October, 1918, and the only average journey time that is longer is to and from Bournemouth, though the frequency of service comprised in the last-mentioned average is 50 per cent. greater in 1940 than in 1918. Similarly, the frequency is 60 per cent. greater in the case of Cambridge, and 86 per cent. greater in that of Oxford, to offset the slight lengthening of average time. The greater the distance covered, so much better relatively is the service offered in 1940 than in 1918; the average L.N.E.R. journey between King's Cross and Aberdeen, for example, is 2 hr. 2 min. less than in 1938, Edinburgh is 49 min. nearer, and Newcastle 38 min. nearer; similarly on the L.M.S.R. the average Euston—Inverness time is 56 min. less, and the Euston—Glasgow time 70 min. less than in 1918.

A general average of the differences in frequency and journey time between the war services of 1918 and 1940 and the full normal service of the 1938-1939 winter, based on the figures in the accompanying table, gives the following percentages:—

Change in service	L.M.S.R.	L.N.E.R.	G.W.R.	S.R.
	Per cent.	Per cent.	Per cent.	Per cent.
Reduced frequency, 1938/1918 ...	33·4	37·6	32·4	42·0
,, ,, 1938/1940 ...	22·6	26·3	21·4	30·5
Increased journey time, 1938/1918 ...	31·6	24·9	23·7	28·6
,, ,, ,, 1938/1940 ...	27·7	20·6	19·1	8·9

The general present position is thus considerably better than in 1918; for all the railways the average frequency of service was 36·6 per cent. less in 1918 than in 1938, but only 25·2 per cent. less in 1940; and the average journey, though 27·2 per cent. longer in 1918, is only 19·1 per cent. longer in 1940. On the S.R. Brighton can still be reached in 60 min. from London, as in peacetime, and the best times to and from Hastings, Portsmouth, and Southampton are only from 7 to 10 min. longer; similarly the average journey time is unaltered in the case of Salisbury, and (though with much reduced frequency) is only from 2 to 10 min. slower in the case of Brighton, Hastings, Margate, Dover, and Southampton. In this connection it must, of course, be remembered that the introduction of long-distance electrification by the Southern Railway between the last and the present wars, with the increase in train frequency and speed so brought about, considerably affects any comparison that may be made between 1918 and 1940 travel conditions on the Brighton, Hastings, and Portsmouth lines.

Finally, a comparison between the train services now in force and the improved war services of the early part of 1940 shows that the worsening after another nine months of war has been very slight. In one or two cases (Leicester, Liverpool, Glasgow, Perth, and Inverness), L.M.S.R., Nottingham and Newcastle, L.N.E.R., Bristol and Weymouth, G.W.R., and Hastings and Salisbury, S.R.), the frequency of service has been increased, though mostly by connections rather than by additional through trains; and one or two places show small reductions in average journey time, such as Norwich (5 min.) and Newcastle, L.N.E.R., Worcester and Plymouth (18 min.), G.W.R., Dover, Southampton, and Salisbury, S.R. The most substantial increases in average journey time are 17 min. Glasgow, 16 min. Perth, and 36 min. Inverness, L.M.S.R. (adversely affected by the addition of one slower new service to a relatively small number of existing services), 8 min. Nottingham and 9 min. Hull, L.N.E.R., 11 min. Bristol, G.W.R., and 5 min. Margate, S.R. The only fastest times to be reduced are Norwich (12 min.), Leeds (4 min.), and Aberdeen (1 min.), L.N.E.R.; the biggest increases have been Euston—Manchester, L.M.S.R. (18 min.), and Cannon Street—Margate, S.R. (12 min.), but most of the fastest times remain unaltered. In brief, as is stressed in the editorial comment which appears on p. 659, in every respect other than punctuality the British long distance train services are far better after the passage of fifteen months than could have been foreseen or even expected when the war began.

An Early Dynamometer Car

AN account of an attempt to make a dynamometer and recording carriage in the early days of railways is contained in the remarks made by a Mr. Babbage in the course of a discussion on railway accidents at the Institution of Civil Engineers on April 1, 1862, when he stated, in referring to accidents which were the result of "mechanical causes," that in ascertaining the "exact mechanical facts" concerned in any given accident, it was very desirable that machinery should be employed to measure and record them. He then pointed out that the Great Western Railway placed a second class carriage at his disposal so early as 1839, which was used as follows:—

The inside was cleared out. Holes were made in the bottom, through which strong wooden supports were firmly fixed on the framework to which the wheels were attached. A table, extending throughout the length of the vehicle, was fixed on these supports, having large rollers at each end, one carrying a roll of paper 1,000 ft. long. The rollers were chain driven from one axle, with gearing enabling the paper to be moved at any rate from 3 ft. to 40 ft. a mile. Just above the paper and in the middle of the table a platform supported nine pens, moved transversely to and fro by suitable apparatus. The first indicated the speed at every instant, the pen being connected with a chronometer movement beating seconds, causing a dot to appear at every second, the number of dots in a given space giving the velocity. The chronometer was suspended on springs. The second pen was connected with a "powerful spring by which the experimental carriage was connected with the engine." By its deviations, this expressed the force of traction and recorded a so-called "curve of traction." The third pen was for recording the "curve of progression." It was well known, the designer said, that a train usually had a "continuous serpentine movement." This was injurious to the rails as well as the carriages and a source of expense and danger. A travelling bar, attached to the vehicle by a powerful hinge joint, pressed against the side of the rail and its motion was conveyed to a pen which thus recorded the "serpentine movement." As this device was frequently broken during experiments it was so arranged as to be easily withdrawn at once by those in the carriage when this happened.

The other six pens related to the body of the carriage. First, the vertical shake, or rise and fall at its centre, the lateral shake at that point, and then the end shake. The remaining three pens recorded the same movements at one end of the vehicle. The machinery is said to have answered its purpose, although extemporised. Ten sheets of paper, each 1,000 ft. long, were wholly covered on one side and partly on the other, by curves thus traced and recorded. On another occasion the length of paper was reduced by covering a revolving cylinder with one layer, which was advanced endwise by a screw, so that a long spiral was formed.

Concluding, Mr. Babbage said that "every engine ought to record by machinery and upon materials beyond the control of the driver, the following particulars:—First, the times of starting and stopping; secondly, the velocity at every instant; thirdly, the tractive force employed; fourthly, the curve of progression. Such facts would be invaluable for detecting the mechanical causes of accidents, and they would also afford a very great check against those which might arise from negligence."

XUM

REHABILITATION OF THE WESTERN PACIFIC RAILROAD, U.S.A.

During the past four years over 900 miles of main line have been reconditioned, including the widening of formation for nearly 900 miles, the relaying of 600 miles of track, and 650 miles of re-ballasting

DUE, no doubt, to its having been the last transcontinental line to be built in the States (between 1905 and 1911), the 924-mile main line of the Western Pacific Railroad was laid out to a remarkable standard of easy gradients, considering the country traversed. The ruling gradient throughout is 1 in 100, but this grade is maintained almost continuously for 116 miles in the course of the crossing of the Sierra Nevada mountains by way of Feather River canyon, which necessitates a rise of 4,627 ft. The sharpest curve is, moreover, 10 deg. (573-ft. or say 8¾-ch. radius), but in these 116 miles there are no fewer than 391 curves, aggregating 72 miles in length. To adhere to these gradients and curves, 33 tunnels, having a total length of 7,336 yd., and practically continuous heavy earthwork on sidelong ground were necessary. On another part of the line also there is a 33-mile continuous length of 1 in 100 grade, and a 6½-mile loop including 2,230 ft. in a continuous 10-deg. curve, mostly on an embankment 75 ft. in height.

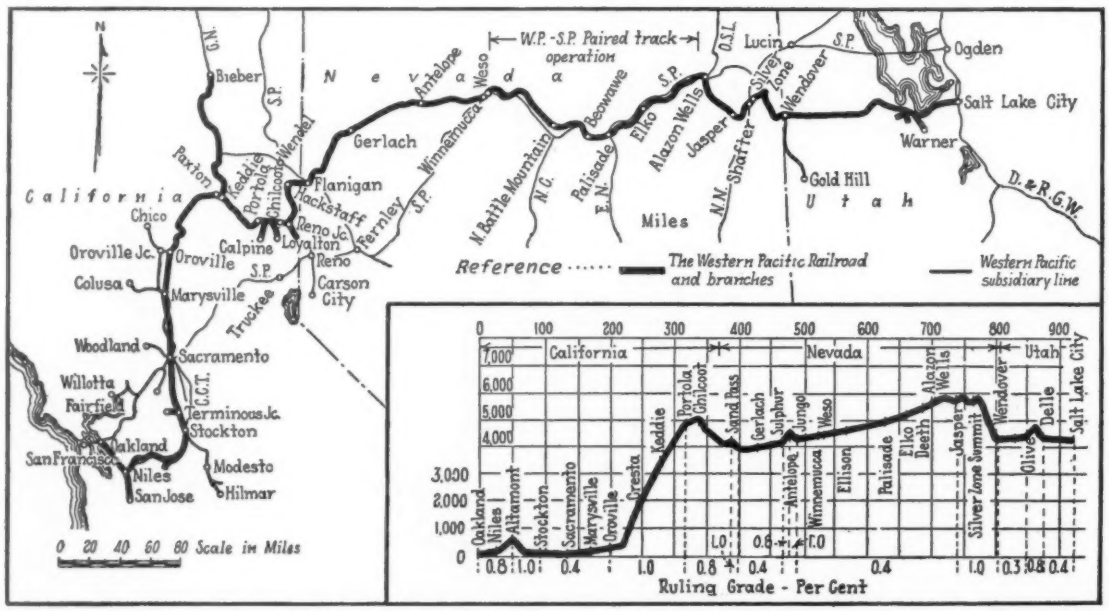
To bring this trunk line up to a standard suitable for modern high-speed running, therefore, no regrading or realignment has been considered necessary, but in other respects some $10,000,000 have had to be spent with this object in view.* For, though located to these high standards, the line itself was constructed as cheaply as possible. Formation widths in both cutting and bank were not up to present standards, tunnels were unlined, bridges were mainly of timber, and 85-lb. rails only were used, laid on untreated 8-ft. × 8-in. × 7-in. sleepers with a 6-in. to 8-in. bed of gravel ballast beneath them. On curves of over 1 deg., very light bearing plates were used, but elsewhere the rails were spiked directly to the sleepers; short transition curves were inserted.

During the last few years, however, some 890 miles of bank and cutting formation have been widened and many miles of embankment in Feather River canyon have been protected with stone pitching. Meanwhile, 659 miles of line have been reballasted, 293 of them with crushed rock or broken gravel. During the five years ended December 31, 1938, about 600 miles of track were relaid, with 100-lb. rails on grades flatter than 1 in 100, and with 112-lb. section on the 1 in 100 grades and also on the 178 miles of " paired " track with the Southern Pacific Railroad, where both railroads use the Western Pacific single track for all eastbound trains and the Southern Pacific single track for westbound traffic. At the same time, 8-ft. × 9-in. × 7-in. treated sleepers were introduced, impregnation being with a creosote-asphalt-base oil mixture. Other measures standardised were longer spikes, bearing plates, heat-treated fishbolts, and seven anti-creep anchors to the 39-ft. rail length, except in Feather River canyon, where ten are used.

Modern equipment and highly organised labour was employed for all these works, including power wrenches and spike drivers, adzing machines, Burro rail-laying cranes, and 24-tool pneumatic ballast beaters. Specialised gangs carried out the re-ballasting with a Jordan spreader; where the lift on new ballast was not more than 4 in. the work was done in one operation, the final surface being put on immediately with power tampers. If more than one lift was necessary, each spread of ballast was consolidated by several days of 30-m.p.h. traffic, and the final lift power-tamped. Progress was rapid, an average of more than a mile of track being relaid each day, including the renewal of all turnouts and picking up released material, in spite of the work being done under traffic.

Other works carried out were lengthening of transition curves, installing rail lubricators on sharply curved sections, tunnel lining, and strengthening of bridges. Rail lubrication on 10-deg. curves has been found to double the life of the rails. The work has all been carried out under Colonel J. W. Williams, Chief Engineer, Western Pacific Railroad, and Mr. B. J. Simmons, Engineer, Maintenance of Way & Structures.

* An illustrated description, from which these notes are taken, appeared in the *Railway Age* of August 31, 1940.—ED., *R.G.*



Map and (inset) profile showing the route and gradients of the Western Pacific Railroad in its crossing of California, Nevada, and Utah, between San Francisco and Salt Lake City

ROAD TRANSPORT SECTION

This section appears at four-weekly intervals

Operating Buses in East Kent

PROBABLY the most difficult and hazardous corner of Great Britain, from the road transport point of view, is the territory served by the East Kent Road Car Co. Ltd., and Mr. Sidney E. Garcke, the Chairman of the company, has paid tribute to the work of the busmen in this area in constantly running the gauntlet of enemy attack during their ordinary task of providing public passenger transport in Dover and throughout the eastern parts of Kent. In this district no questions have arisen as to whether the public services should be maintained after dark or during air raids, and no member of the staff from the most senior to the most junior has raised any points about the precise boundaries that might be drawn around his duties. Mr. Garcke was presiding at the 24th ordinary meeting which was held—on this occasion at Maidstone—on December 10. The company had its origin during the last war as an amalgamation of some comparatively small local businesses, and therefore in the early days of its existence it had to study the primary importance of preserving assets and goodwill in peculiarly difficult circumstances—experience which doubtless is serving it well at the present time. Naturally the company is dependent for its profits upon the heavy visitor traffic every summer to the coast resorts. In the year under review there was none of this holiday traffic, and the company is now faced with the prospect of serving a district having a heavily reduced civil population in both summer and winter. Actually last winter provided a record for the company, as it was busy with evacuees from London and the Medway towns, but this position changed with the capitulation of France and the transfer elsewhere of these evacuees. Many of the vehicles which might otherwise have been laid up have been diverted to other parts of the country.

The Sphere of Road Transport

SOME interesting conclusions as to the sphere of road transport were enunciated by Mr. J. S. Nicholl, Director & General Executive Officer of McNamara & Co. Ltd., in the course of a paper read before the Royal Society of Arts on December 11. Mr. Nicholl said that before the war there was a total of about half a million motor goods vehicles on the road, of which 70 per cent. were operated by traders for the carriage of their own goods only; the balance of about 145,000 vehicles, owned by some 60,000 operators formed the fleets usually regarded as " public goods transport vehicles." About one-third of these operated partly for hire and partly for carrying goods owned by their proprietors. Included in that number of road motor vehicles were some 10,000 operated by railway companies, the greater part of which were probably employed on local collection and delivery services. Mr. Nicholl stressed his view that it would clearly be wrong to conclude that all the traffic carried by this public carriers' fleet could be described as " competitive " in relation to other forms of transport. Purely local transport had no choice but to move by road because that was so often the only method of approach to its destination. It would, of course, be exceedingly interesting to know what proportion of road traffic was competitive with other forms of transport, but there are no statistics to assist in that direction and it has to be borne in mind that many of the factors vary so often that a reliable answer is unlikely ever to be forthcoming. Mr. Nicholl dealt briefly with possibilities of nationalisation of transport. Apart from the political aspect, that would entail bringing road transport under a single centralised control and Mr. Nicholl pointed out that this could not take place without the loss of the individualism which was so marked a feature of the development of the road transport industry. He declared that there were spheres of activity in which individualism had been the means of solving many problems over a vast range of the rural carrying trade. It impressed him as being by far the most practicable basis; he could not visualise a nationalised system or any other single monopolised control functioning efficiently except at a staggering increase in cost. He declared that sound development was to be found not in monopoly, but rather in encouraging evolution towards larger and more responsible units in the carrying industry.

The Nizam's State Railway Road Services

THE preliminary figures given in THE RAILWAY GAZETTE of May 3 last, at page 635, relating to the working of the road services of the Nizam's State Railway, are now confirmed in the annual report for the year ended March 31, 1940, sent us by Major E. W. Slaughter, the General Manager. Gross earnings from road transport realised Rs. 29·55 lakhs, or Rs. 0·9 lakh over the previous year. This is a record, being Rs. 0·1 lakh more than the previous highest figure, that of 1937-38. Working expenses, at Rs. 27·30 lakhs, were less by Rs. 1·9 lakhs, net earnings Rs. 2·8 lakhs higher; the working ratio has fallen to 92·4 per cent. Passenger receipts increased from Rs. 27,46,711 to Rs. 27,80,134, while earnings from goods traffic rose from Rs. 98,688 to Rs. 1,53,791, and miscellaneous from Rs. 20,384 to Rs. 21,169. Route mileage operated increased slightly during the year from 4,069 to 4,082. The fleet was reduced in number from 368 to 347 during the year, mainly by the scrapping of old petrol-engined buses and lorries taken over from private services in 1936. The commercial side of the goods services was transferred in 1939 to the railway, the Road Transport Department now being treated as a cartage contractor and payment being made by the railway to the Road Department as such. The effect of the reorganisation completed in 1938-39 has become apparent, in improved punctuality, reduction in frequency of failures, and reduced working costs.

South African Road Transport

THE ninth annual report of the Central Road Transportation Board, constituted under the Motor Carrier Transportation Act of South Africa, 1930, covers the period April, 1939, to March, 1940. In addition to the headquarters of the board at Pretoria, there are ten local boards which function in the transportation areas fixed by the Act. Most of the meetings of the central board at centres other than Pretoria were in respect of appeals against decisions of local boards. Of 106 such appeals, 22 were upheld, 34 partly upheld, 26 dismissed, and 12 withdrawn. For the year 1939, the number of motor carrier certificates issued was 8,060, of which 1,292 were for passenger vehicles, 2,074 for dual purpose vehicles, and 4,694 for goods vehicles. A number of temporary certificates and exemptions was also issued. Since the last revised Proclamation it has been found expedient again to amend the transportation areas, and further to proclaim all public roads within the Union and South West Africa as transportation routes. In dealing with appeals by the Railway Administration the board feels that in South Africa it is essential that the railways, being a national concern, should be protected from competition in the sphere to which they are best suited, as otherwise the taxpayer has to bear the financial consequences. The main problem to be solved is how both forms of transport can be used to the advantage of the community and of the interests concerned. According to the traffic returns submitted by carriers, 113,049,439 passengers and 4,327,679 tons of goods were transported in the year 1939. The corresponding figures for 1938 were 104,582,056 passengers and 3,383,997 tons of goods. The revenue of the board amounted to £30,403, and its expenditure to £30,319.

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Road Transport and the War—16

Road haulage problems—Alternative fuels—Freight transport in Germany—Bus services during air raids and in the blackout—Bus pooling in the provinces—Green Line activities in wartime

The pooling of road transport at the docks, the adjustment of speed restrictions on commercial vehicles, and measures to promote road safety are among the subjects which have been discussed by the Road Haulage Consultative Committee since its appointment by the Minister of Transport at the end of August. Road transport at a number of ports is being pooled to ensure the most economic use of vehicles. Methods of operating these pools necessarily differ, but as the result of its examination of the question the committee expects to be able to formulate certain general principles which will facilitate smooth working.

The committee has also considered a proposal to increase the "unladen weight" limit of the motorcar class of commercial vehicles. If adopted this would have the effect of permitting increased speed for a considerable number of goods vehicles. The aid of the whole road transport industry has been enlisted in the road safety campaign and the committee has suggested various ways in which operators of vehicles can make this aid effective.

Driving Licences for Learners

Provisional driving licences issued after October 18 remain in force for twelve months instead of three months as formerly. The charge remains unaltered at 5s. Effect has been given to this decision by an Order in Council amending Regulation 72 of the Defence (General) Regulations, 1939.

Using Wrecked Army Cars

A department of the Ministry of Supply has been formed to use parts of wrecked army vehicles. Previously, when cars and lorries were damaged beyond repair, they were sent to the scrap heap. This department—the Reconditioned Unit Stores—will mend parts which are repairable, test them to the strict standard required by the Army, and sort them out so that they may be used again to get other vehicles running.

Group Insurance of Goods Vehicles

Since September, 1939, insurers have agreed for periods of three months at a time to continue and extend, without any general increase in rates, existing policies for "grouped" motor goods vehicles, although the Emergency Powers (Road Vehicles & Drivers) Order, 1939, removed certain restrictions on "A," "B," and "C" licences under the Road & Rail Traffic Act, 1933. This arrangement was extended until August 31, 1940, and the Minister then announced that the insurers had agreed to extend the arrangement until November 30, 1940. A subsequent announcement recorded the further extension of the scheme for the 3-month period ending February 28, 1941.

Lights During Air Raids

The Minister of Home Security made a lighting restriction order which became effective on October 23. Only three lights on each deck are now permitted during an air raid warning for the interior illumination of tramcars, trolleybuses, or other public service vehicles. In addition, subject to certain restrictions, light may be displayed from one lamp on the platforms by which passengers enter or leave vehicles.

From the same date further provisions as to the size of side, rear, and stop lights became effective. The aperture from which light is emitted had to be reduced to the size of a halfpenny and to be so dimmed so that, while the light is clearly visible at a distance of 30 yd., it is invisible at 300 yd. The use of a marked headlamp, which previously had to be extinguished during an "alert," may now be retained during an air raid while the vehicle is in motion (including stops in traffic) unless instructions to extinguish it are given by a police officer.

Alternative Fuels in England

Replying in October to a question put in the House of Commons, Mr. D. R. Grenfell, Secretary of Mines, said that over 3,000 vehicles were now using home-produced fuels. Of these, about 650 used producer-gas, 1,038 steam, and most of the remainder coal gas. Mr. Grenfell referred also to the Ridley Committee's report and those of other committees examining cognate subjects, and said that these raised questions of Government policy which must be settled before publication was advisable.

Producer-Gas News

Enness Gas Producers Limited, which makes a plant akin to the Government producer, has marked its activities with those of the Sentinel Waggon Works (1936) Limited, and the new title of the company is Enness-Sentinel Limited. Distributors have been appointed throughout the country.

New models of B.V.P. producers have been introduced by British Vehicle Producer Gas Limited, comprising five equipments ranging in price from £115 to £165. A new Vacuumatic filter has been fitted as part of the new models, and operates on the principle of turbulent oil on which fluctuations of pressure are caused by the action of the engine pistons. This filter is supplementary to filters of the more usual types.

Compressed Gas Conveyance

Regulations governing the conveyance in cylinders of compressed gas for the propulsion of road vehicles, other than those which comply with the Gas Cylinders (Conveyance) Regulations, 1931 (b), are contained in a 3d. Draft Statutory Rules publication issued by the Home Office through H.M. Stationery Office, and bearing the title Compressed Gas Cylinders (Fuel for Motor Vehicles) Conveyance Regulations, 1940. Internal pressures in cylinders have not to exceed 3,000 lb. per sq. in. or 1,800 lb. per sq. in. according to the manufacturing specification used, and no cylinder may be filled with gas unless within the preceding two years it has been subjected to the prescribed hydraulic test. Cylinders must have been made by manufacturers approved by the Home Secretary, and must comply with one or other of two specifications included in the above Draft Statutory Rules. Every cylinder must bear marks indicating that it is used for gas propulsion only, pressure, date of last test, etc.

Road Transport of Freight in Germany

Since the outbreak of war large numbers of passenger motorcars, with or without trailers, have been used in Germany for the transport of goods by road, according to information compiled in the offices of the American Embassy and the American Commercial Attache in Berlin. Forwarding agents have been especially active in using passenger cars to transport their express goods to and from railway stations. In order to distinguish passenger cars used for conveying merchandise from those which carry only passengers, the former must be marked with the inscription *Bebelfalieferwagen* (auxiliary delivery vans). The inscription must be in white letters 8 cm. high and appear at the back, or on the sides, or on the body of the car immediately below the window glass. Paint which cannot be washed off must be used. Vehicles designated auxiliary delivery vans must be used exclusively to carry goods.

The General Commissioner for the Road Motor Industry in Germany has announced that from October 1, 1940, only

such trailers for lorries and passenger cars as are specifically provided for in the approved war programme may now be manufactured. The readjustment programme for the manufacture of trailers for trucks and passenger cars expired on that date. Exceptions are made in instances where the merits of the case justify such action. The provisions of the above order do not apply to the manufacture of such trailers as come within the scope of the army programme. The time limits regarding the manufacture of uniform trailers for lorries and passenger cars are as follows. All trailers ordered by the Ordnance Office of the Army for delivery after July 1, 1940, must be supplied in the standard type insofar as they comprise models for which a uniform construction has been established. Some manufacturers had previously contracted for materials for old type construction, and in these cases, as well as where considerable delay in delivery would result from efforts to procure the necessary material for production of the uniform models, orders for the third and fourth quarters of the present year may be executed in old type trailers. All orders for delivery after January 1, 1941, must comply with the standardisation requirements. Lorry and passenger car trailers for use by industrial enterprises, and for which a uniform standard of construction has been developed in accordance with previous administrative regulations, will be permitted to run on public roads after April 1, 1941, only if the trailers have been manufactured in accordance with the approved standardisation requirements.

Alternative Fuels in Germany

In the issue of THE RAILWAY GAZETTE for August 25, 1939, we gave particulars of the very wide use made of butane and other alternative fuels by road transport vehicles in Germany. Commenting on this subject recently, the Commercial Attaché of the American Embassy, Berlin, says that the Reich Ministry of Transport gives a cash subsidy of 600 RM. for each conversion (compulsory) of a petrol-engined lorry to producer-gas operation, and 1,000 RM. for a conversion of a diesel lorry. The payment of the subsidy is conditional on the employment of a driver certified by the authorities to be competent to handle a producer-gas vehicle, the official belief being that greater driving skill is needed. Further, in view of this belief, the Reich Minister of Labour has ordered that an exception be made to the law of October 12, 1939 (prohibiting increases in wages), in favour of drivers of producer-gas vehicles, and that a bonus of one pfennig per km. be paid to such men.

Road Services After Air Raid Warnings

The National Joint Council of the Road Passenger Transport Industry, meeting at Derby on November 22, decided to recommend local authorities owning passenger transport undertakings and their employees to comply with the request of the Ministry to regard the siren as nothing more than an alert and to continue operating until danger was imminent. It was also agreed in principle that there should in such circumstances be an augmentation of the Government compensation for deaths or injury resulting to employees from following this practice and that the application of this principle should be left to the local authorities.

In many parts of the country road transport operators have discussed the position as to the running of transport services after air raid warnings have been given, and in particular attention has been focused on night driving during the "alert" period. In the Road Transport Section of THE RAILWAY GAZETTE of November 1, at page 460, it was recorded that the London & Home Counties Haulage Contractors Association had issued a card containing instructions to drivers who were on the roads during air raids. In general these were that orders given by the civil or military authorities must be obeyed, and repeating the regulations which apply to all road users during air raids as to the dimming of lights and, if necessary, parking of vehicles.

In the provinces there have been meetings between employers and employees at a number of important centres. At Edinburgh it had been agreed that the corporation transport services should continue to operate during the "alert" until it is considered dangerous, that is until enemy aircraft are overhead, bombs are being dropped, or there is anti-aircraft gun fire in the vicinity. Vehicles should then be stopped as near as possible to a shelter and passengers advised to take cover. Operation of the vehicle should restart when the immediate danger appears to have passed. Later, however, the employees rescinded this decision in favour of ceasing operations during the "alert" period. In Manchester and Liverpool a decision has been reached to continue all rush hour services until 7.30 p.m., after which there will be a reduction in services. Night services continue. At Newcastle, too, trams and buses will run during "alert" periods and the drivers will be given discretion as to when to stop. The Leeds Corporation Transport Committee has decided on a similar course.

Peak Period Congestion during the Blackout

In some provincial centres congestion on public service vehicles is resulting from early closing of large numbers of shops and industrial establishments at the same hour in order to enable employees to reach their homes before nightfall. Recently the North Regional Transport Commissioner issued an appeal asking members of the travelling public and employers to co-operate in preventing peak hour congestion, and he suggested to employers that every effort should be made to introduce a system of staggered hours of employment. The situation has been intensified in some districts by the recent habit of persons leaving a large city to sleep in surrounding towns and returning the next morning. On November 28 the Birmingham & Midland Motor Omnibus Co. Ltd., for example, issued a warning in the following terms: "Unless the travelling public who are not engaged on work of national importance will stop travelling in our buses during peak hours we shall be compelled to adopt a system of priority armlets to be issued to munition workers only."

Bus Pooling in the Provinces

The loan of a large number of provincial buses to help out the London Passenger Transport Board, although a novel practice in the London area, has had its counterpart among the large railway-associated bus companies ever since the outbreak of hostilities. Arrangements to this effect were the subject of a tentative agreement made some time before the outbreak of war when it was realised that the progress of hostilities might easily result in a fluctuation of demand in excess of the capacity of the fleet of the particular company serving an area, even although vehicles normally kept for pleasure and holiday work would become available for business traffic. Accordingly, vehicles owned by companies serving coastal areas containing large numbers of pleasure resorts have been observed working in industrial districts far from their peacetime base. For instance, some buses of the East Kent Road Car Co. Ltd. have been drafted for service in the North-Eastern Region. East Kent Daimler vehicles (originally acquired from the Isle of Thanet Company) have been seen working the Mansfield—Clowne—Sheffield service on hire to the East Midland Motor Services Limited.

Municipalities also have pooled their resources to some extent, as exemplified by Blackpool Corporation buses working in Leeds. Local pooling schemes for wartime mutual help have been discussed by municipal transport managers in Lancashire & Cheshire, and elsewhere, and, even where such plans are in the embryo state, there is little doubt that they could be brought into being immediately should the urgent need arise in order to avert large-scale dislocation resulting from enemy action.

Green Line Activities in Wartime

Some months before the outbreak of war the London Passenger Transport Board made preparations for the rapid conversion into ambulances of some 240 Green Line coaches. These vehicles had their seating accommodation so arranged that conversion could be carried out with the least possible delay. Subsequently it was decided to extend the arrangements to the whole fleet and on August 31, 1939, all Green Line services were suspended with the exception of three routes serving the Ilford—Hornchurch—Romford—Brentwood areas and these three routes ceased on September 1.

All the 441 coaches comprising the Green Line fleet were converted into ambulances and many of the vehicles were

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used to evacuate patients from the London hospitals as part of the Government evacuation scheme carried out in the two days before war was declared. All Green Line services were discontinued for an indefinite period and, on those country sections of the routes where there was no regular means of transport apart from the Green Line coaches, London Transport instituted local services of Country Buses. Some snapshots of Green Line coaches in use as ambulances are reproduced. The Green Line ambulances are equipped with 10 stretchers each. They are still driven by their old drivers (now steel-helmeted), who have been trained in stretcher-bearing and other ambulance work. The coaches stand by, either in the bus garages or at points near by, ready to answer any call for the evacuation of patients from the London hospitals.

On November 1, 1939, three express services of double-deck buses in green livery began to run in East London on former Green Line coach routes and this was the beginning of the wartime re-introduction of such facilities. At the end of November of the same year, 153 green vehicles were released from ambulance duty and on December 13, 1939, some of these coaches re-opened the Aldgate—Upminster—Corbets Tey route.

During the present year there has been a gradual re-introduction of Green Line services as the need for the vehicles as ambulances has not proved as heavy as was at first feared. Four coach services were restored on January 17, two more on February 7, a further four on March 13, and one on May 8.

One difficulty which arose in the operation of those services which traverse the whole of the central area was that of time-keeping after the development of intensive air raids had necessitated some temporary route diversions, and on October 23 four Green Line coach routes were ended in London instead of running through Central London from one

Table of Green Line Services

New Designation	Old Designation	Route	Standard Interval, Minutes	Date of Opening
2	A	Gravesend–Victoria	30	17.1.40
3	B	Wrotham–Victoria	60	4.12.40
5	C	Tunbridge Wells–Victoria	30	13.3.40
8	H.1	East Grinstead–Victoria	30	13.3.40
9	I	Crawley–Oxford Circus	60	4.12.40
		Redhill–Oxford Circus	60	4.12.40
10	J	Reigate–Oxford Circus	30	4.12.40
14	K.1	Dorking–Victoria *via* Epsom	30	18.12.40
15	K.3	Dorking–Victoria *via* Kingston	30	18.12.40
18	M.1 & 3	Guildford–Oxford Circus	30	4.12.40
20	C	Chertsey–Victoria	30	13.3.40
21	D	Staines–Victoria	30	18.12.40
23	A.1	Ascot–Victoria	60	17.1.40
23A	A.2	Sunningdale–Victoria	60	17.1.40
26	G	Windsor–Victoria	20	18.12.40
26A	P	Farnham Common–Victoria	60	18.12.40
33	Q	High Wycombe–Oxford Circus	30	17.1.40
34	R	Chesham–Oxford Circus	60	17.1.40
		Amersham–Oxford Circus	60	17.1.40
35	B	Aylesbury–Victoria	60	4.12.40
40	E	Aylesbury–Victoria	30	13.3.40
40A	F	Hemel Hempstead–Victoria	30	13.3.40
40B	J	Watford–Victoria	30	4.12.40
45	H	Luton–Victoria *via* Radlett	30	7.2.40
46	—	Luton–Victoria *via* Golders Green	30	4.12.40
47	K.1	Hitchin–Victoria	60	18.12.40
47A	K.2	Welwyn Garden City–Victoria	60	18.12.40
49	M	Hertford–Oxford Circus	20	7.2.40
52	N	Epping–Oxford Circus	30	8.5.40
53	V	Bishops Stortford–Aldgate	30	4.12.40*
54	X	Romford–Aldgate *via* Eastern Avenue	20 peak / 30 slack	18.12.40
55	Y.1	Brentwood–Aldgate	30	1.11.39
		Romford–Aldgate	6 peak / 15 slack	1.11.39
58	Y.2	Corbets Tey–Aldgate	30	13.12.39
		Hornchurch–Aldgate	10 peak / 15 slack	
59	Z.1	Grays–Aldgate *via* Rainham	20 peak / 30 slack	1.11.39
59A	Z.2	Grays–Aldgate *via* Aveley	20 peak / 30 slack	1.11.39

* Bishops Stortford—Portman Square Sat. aft. and Sun. only, 8.5.40

Three views showing a Green Line coach converted for use as an ambulance to evacuate patients from London hospitals

side to the other so that each route thus became in fact two separate routes.

At the end of November, London Transport announced that the number of Green Line coach routes would be doubled by the reinstatement of the pre-war services and that a number of existing coach routes would be strengthened, amounting in some cases to running twice as many coaches on a route as previously. This programme was made possible by the loan of vehicles from Scotland and the provinces. The improvements were made in two stages: on December 4 eight new services were begun and sixteen revised, and on December 18 eight further new services were put into operation and one more revised. To make possible greater regularity of running the policy already tentatively adopted was extended to all routes—namely, ending them in Central London at one or other of three termini at Eccleston Bridge (Victoria), Oxford Circus, and Aldgate. The new services generally follow the routes used before the war but there are some variations.

Since December 4 numbers instead of letters have been used to designate the route and these numbers have been so chosen that there are no buses and coaches bearing the same number running on the same route. The accompanying table shows the Green Line services as at present working, indicates their old and new designations, and shows their principal wartime developments.

Fares on Green Line coaches were in some cases increased on August 27, 1939, when there was a general advance of 5 per cent. on railway charges. Where coach services paralleled those of the main-line railways, fares were adjusted in order to avoid disparity with those of the railways, and this affected about a third of the Green Line coach fares. In July, 1940, by Order of the Minister of Transport, an increase of 10 per cent. was made in coach fares subject to a fractions rule, and again from the beginning of December coach fares were raised, this time by approximately 6 per cent., and fractions rule applies to this case also. The last increase makes the present Green Line coach fares 16⅔ per cent. above those ruling at the outbreak of war.

London Buses in Service

Some interesting figures relating to the number of buses in daily service and the total of service miles run in the area covered by the London Passenger Transport Board were given in the House of Commons on November 27 by the Minister of Transport (Lt.-Colonel Moore-Brabazon) in response to a Question. He said that the average daily number of buses operated by London Transport in October, 1940, was 4,749, and in October, 1939, 3,856. The number of service miles run during the four weeks ended October 26, 1940, was 14,100,000 as against 14,700,000 in the four weeks ended October 28, 1939. The decrease in miles run was accounted for by the fact that the augmented peak-hour services were more than offset by the decrease in traffic after dark.

Steel Helmets for Road Transport Workers

Mild steel helmets are now available for issue to road transport workers engaged on essential services. This helmet does not afford the same protection against direct rifle or machine gun fire as the Service steel helmet, but it is considered to give adequate protection against falling debris, spent shrapnel, and steel splinters. The price of the helmets is 7s. each. Any road transport undertaking wishing to be supplied with steel helmets should apply to the appropriate Regional Transport Commissioner. The application should specify (i) the number of helmets needed (calculated on the basis of provision for one shift only); (ii) the employees to whom helmets will be issued (*i.e.*, drivers, conductors, attendants on goods vehicles, inspectors, pointsmen, or other outside staff); (iii) the areas covered by the routes or services concerned; and (iv), in the case of goods vehicles, the kind of goods carried.

It will be recalled that, early in October, London Transport announced the impending issue to its road staff of fibre helmets (see page 357 of our October 4 issue). As mild steel helmets became available, the fibre variety was not used, and some 40,500 of the mild steel kind have now been issued, beginning on October 26, 1940. The spotter seen in the accompanying illustration is wearing one.

London Transport road spotter on the control tower in Victoria station forecourt to aid bus drivers and conductors to carry on during air raids

London Traffic in the Blackout

On Wednesday, December 4, the London Transport trams and trolleybuses began to work to their winter schedules. These are similar to those adopted on November 20 for the Central Buses, in as much as peak hour services begin earlier than heretofore, and the last trams and trolleybuses leave the central area about 10.30 p.m. The all night tram and trolleybus services continue to run unaltered.

Road Services between Switzerland and Spain

Direct motorcoach services for travellers proceeding to Spain, Portugal, and overseas, organised by travel offices in Geneva, have been running fairly regularly since late July, and good numbers of passengers have been conveyed, though at times they were held up for some days at the Spanish frontier. Some coaches ran through from Geneva to Lisbon, but the more popular was a two-day service to Barcelona (whence ordinary rail or air connections were used), with weekly departures.

Restricted Road Travel in Holland

Further restrictions on road travel in Holland have been enforced by the occupation authorities. Local tram and bus services in all towns must now cease at 8.30 p.m. The number of taxis has been reduced most drastically. Strict control is exercised on the use of taxis, which is permitted for urgent purposes only. As a result of these measures bicycles are being used in increasing numbers. Amsterdam has introduced the first bicycle-taxis, two-wheel two-seat chairs drawn by the taxi driver on an ordinary bicycle. These vehicles are rather similar to the bicycle rickshaws used for a short period in the streets of Shanghai about 15 years ago. Another war measure is the re-introduction of horse-drawn buses in one or two Dutch towns. Ordinary diesel buses (with engine removed) are drawn by two, three, or four cart horses.

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Overseas Notes

The Rule of the Road in Sweden

The Swedish Royal Committee has unanimously recommended that Sweden should change from driving on the left, as at present, to driving on the right. The change is planned to take place in June, 1943.

Collapse of Puget Sound Suspension Bridge

On November 7 the great suspension bridge over Puget Sound, near Tacoma, in the Pacific State of Washington, suddenly failed. The bridge, which has a main span 2,800 ft. in length—the third longest in the world—was opened in July last only. Apparently it developed a weaving motion soon after it was opened, and this was accentuated by the wind.

Proposed "Micro-bus" Tourist Service to Bariloche, Argentina

The Department of National Parks has addressed a note to the National Transport Co-ordination Committee in support of the request made to that body by the International Motor Transport Company, asking for authority to operate a tourist "micro-bus" road passenger service between Buenos Aires and San Carlos de Bariloche, the Southern terminus of the State Railways on Lake Nahuel Huapi. It is pointed out that the proposed service would give an additional impetus to tourist movement to the Southern Lakes National Park. The proposed bus service would run via Mar del Plata, Bahia Blanca, Chelforo, Roca, and Neuquén, remaining a few days at Bariloche to permit of tourists visiting the Nahuel Huapi National Park. The return journey would be made either via San Martin de los Andes over the original route or through Santa Rosa and the Pampa Territory.

Through rail communication between Buenos Aires and San Carlos de Bariloche was established in 1935 over the B.A.G.S. and Argentine State Railways. During the summer tourist season—December to April—there is a tri-weekly fast combined service, with through sleeping cars, in both directions, covering the distance of 1,089 miles in about 37 hr.

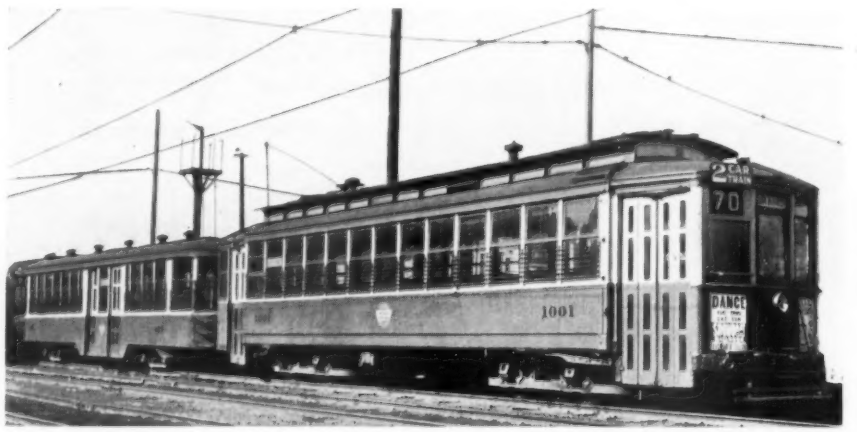
New York East River Road Tunnels

The new Queens-Midtown tunnel for road vehicles, which links 42nd Street in Manhattan with the borough of Queens on Long Island, running under the East River, was opened to traffic on November 15. The tunnel has been planned to prevent traffic congestion on the famous East River suspension bridges and to shorten by nearly half an hour the time of travelling between Manhattan and Long Island. The tunnel is stated to have cost $58,000,000.

A few days earlier it was reported that work had been begun on a road tunnel under the East River, to connect Brooklyn with Manhattan and to be capable of handling some 16,000,000 vehicles a year. This tunnel, which is estimated to cost approximately the same sum as the Midtown tunnel, is intended to be completed in 1944 and to provide direct communication between the "downtown" office district of Manhattan and the shipping and industrial area in South Brooklyn. It will link the new East River Drive and the extended West Side Express Highway on the Manhattan side with the new Belt Highway in Brooklyn.

Burma Road Traffic Carries On

Messages from the Far East report that, despite repeated Japanese bombing, in the course of which the suspension bridges over the Salween and Mekong rivers were hit—one was repaired within 48 hr.—some 3,000 lorries are still constantly on the move along the road between Lashio in Burma and Kunming, capital of the Chinese province of Yunnan. In the up direction their loads are said to include petrol, railway materials, cotton yarn, and machinery; downwards they bring tungsten, wolfram, wood-oil, and tin, destined for shipment from Rangoon. This port and Lashio are stated to be seriously congested with the accumulation of freight of all kinds that had been gradually piling up during the closure of the road, prior to October 18.



Right: A two-car train in the service of St. Louis Public Service Company, Missouri. The use of two-car sets for street transport is being discontinued in the U.S.A., as these are slow in traffic. A correspondent advises us that the St. Louis Public Service Company is the only company in the U.S.A. at present using two-car sets. The vehicles are painted in orange and cream with red lining

Spanish Road Bridge Construction

Work is proceeding, under the direction of the Military Corps of Engineers, on the reconstruction of the road bridges destroyed during the Civil War in Spain. The bridge over the River Ter at Torroella del Montgri, in the Province of Gerona, an armoured concrete structure of seven 17-metre spans, is now ready for traffic. The reconstruction has been begun of the old Torcadan bridge, also over the Ter, on the main road from San Juan de las Abadesas to Comprodon. This bridge is to be rebuilt with four 18-metre spans.

South American Roads

There are altogether 3,618,818 miles of road in the 21 American Republics, according to a summary in *The South American Journal*. Argentina leads (apart from the United States, of course), with 253,115 miles and 275,300 vehicles. Second comes Brazil with 129,057 miles, and Mexico is third with 56,923 miles. The U.S.A., with 3,056,000 miles, has six times the combined road mileage of the other 20 Republics. Road construction in Central America is progressing slowly, and Guatemala and El Salvador may now be crossed by car. In Cuba there is a very high ratio of motorcars to roads, namely, 19·1 to the mile; the U.S.A. figure is 1·1 to the mile.

DEMOLITION OF BROCKLEY WHINS VIADUCT

An historic structure on the one-time East Coast route

BROCKLEY WHINS viaduct, in County Durham, which is now in course of demolition (as shown in the accompanying illustration) was not only a well-known local railway landmark but also a survival of one of the early main-line East Coast railway routes between London and the North. The structure was 247 ft. long and spanned the valley of the River Don at 42 ft. above water level. It consisted of single timber trestles of various heights, roughly 20 ft. apart, on which were laid longitudinal beams and cross girders. Recently decay in the viaduct timbers reached an extent which would have involved reconstruction rather than repair, and the conclusion was reached that the expense of renewal was not justified in view of the very small traffic now handled. Accordingly, the decision was taken by the L.N.E.R. to demolish the structure and abandon the curve or loop line of which the viaduct formed a part.

Brockley Whins viaduct in course of demolition

The rail link between Darlington and Gateshead was opened to the public on June 18, 1844, and completed through rail communication between the Thames and the Tyne, but at first it was not an easy route, as trains ran *via* Leamside, Penshaw, Washington, Brockley Whins, and Pelaw, reversing at Brockley Whins to get from the Pontop & South Shields Railway to the Brandling Junction Railway. It was to improve through running that the Brockley Whins loop line was built at the joint expense of the Pontop & South Shields Railway Company and the Brandling Junction Railway Company, and this curve was brought into service on August 19, 1844. The Brandling Junction Railway was acquired by the Newcastle & Darlington Junction Railway Company a few days before the loop was opened.

The loop was used for through trains between London and the Tyne from 1844 until 1850, when the opening for passengers on October 1, 1850, of a line between Washington and Pelaw enabled trains to avoid Brockley Whins. At that time, therefore, the loop which has now been abandoned ceased to be part of the main East Coast route, and its traffic diminished considerably.

A further stage in the development of the railways in this area was reached in 1868 when the Team Valley line was brought into service and became the main through route for north to south traffic.

NEW PASSENGER COACHES FOR PORTUGAL

IN THE RAILWAY GAZETTE of September 13 reference was made to the stainless steel passenger coaches supplied to the Companhia dos Caminhos de Ferro Portugueses, by the Edward G. Budd Manufacturing Company of Philadelphia. The photograph here reproduced shows one of these vehicles being off-loaded from the ship on arrival in Portugal. The order was for 28 cars built entirely of stainless steel according to the Budd spot-welding system. The only departure from the builder's conventional 4 ft. 8½ in. gauge design is the increased width permitted by the 5 ft. 6 in. gauge of the Portuguese railways. Certain structural changes were incorporated to meet the difference of gauge and other standards, and the operating conditions on the connecting Spanish railways were also taken into consideration.

Off-loading American-built passenger coaches in Portugal

The interior of the vehicles is in accordance with European standards but incorporates modern American trends in de luxe streamlined equipment. Some of the coaches are first and second class, while others are all thirds; in addition, there are some combined second class and dining cars, whilst a proportion of the third class vehicles has large luggage compartments. These have corridors built round the luggage spaces to permit of free passage throughout the train.

The locomotives which will operate these trains have been re-designed, using stainless steel for decorative sheathing to harmonise with the general design of the trains.

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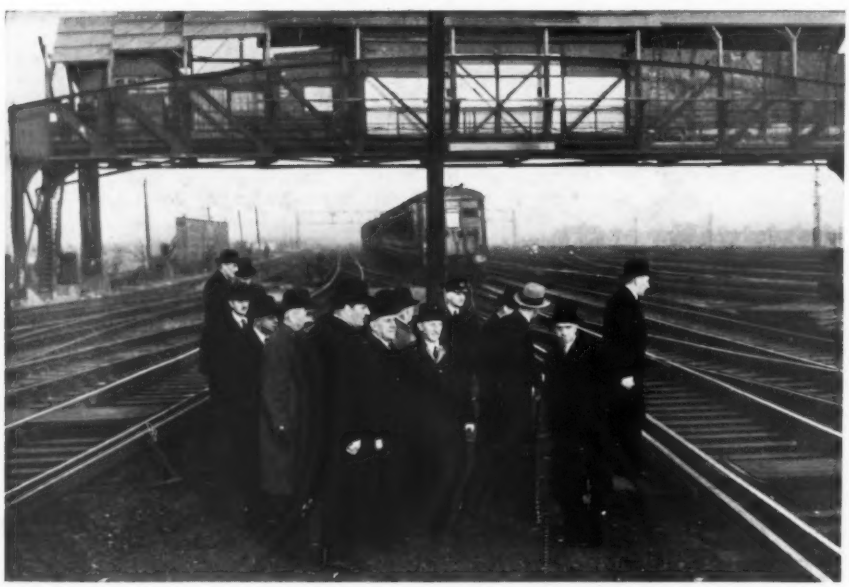
British Railways and the War—50

The Duke of Kent on November 26 paid a visit to Feltham marshalling yard, Southern Railway. Our pictures show the Duke with Mr. E. J. Missenden (General Manager, Southern Railway) and the yardmaster on the platform of the control cabin; the Duke with Mr. A. Cobb, Locomotive Running Superintendent; and the Duke inspecting some Southern Railway members of the Home Guard



On November 29 Colonel Moore-Brabazon, Minister of Transport, visited the emergency headquarters of the Southern Railway, and made a tour of inspection of various other places in the London Area of the system. The snapshot reproduced above shows the Minister at Clapham Junction

RAILWAY NEWS SECTION

PERSONAL

G.W.R.

SUPERINTENDENT OF THE LINE

The Directors have authorised the appointment of Mr. G. Matthews, Principal Assistant to the Superintendent of the Line, to be Superintendent of the Line, *vice* Mr. F. R. Potter, who will retire on December 31, 1940.

SOUTH AFRICAN RAILWAYS

GENERAL MANAGER

We are officially informed that Mr. C. M. Hoffe, Assistant General Manager (Commercial), South African Railways & Harbours, has been appointed General Manager from February 14 next, *vice* Mr. T. H. Watermeyer, who is retiring.

Mr. J. D. White, Chief Traffic Manager, becomes Deputy General Manager.

We regret to record the recent death of Mr. Tom Smith. He retired in November, 1930, from the position of Assistant Superintendent, Western section, Southern Area, L.N.E.R.

We regret to record the recent death of Mr. F. Warriner, M.B.E., who retired a short time ago from the position of District Superintendent, King's Cross, L.N.E.R.

The King has approved that Mr. Arthur Blaikie Purvis, Director-General of the British Purchasing Commission in the U.S.A., be sworn of His Majesty's Most Honourable Privy Council.

Mr. Edgar W. Young, Assistant General Solictor, Baltimore & Ohio Railroad, since 1936 has been appointed General Solicitor with headquarters at Baltimore.

Mr. S. E. Armstrong has been appointed Engineer, Maintenance of Way, New York Central System.

We regret to record the death on October 8 of Mr. William F. Dickinson, General Solicitor, since 1920, of the Chicago, Rock Island & Pacific Railroad.

Captain F. H. Cogan, Assistant Manager, Marine Department, of the Delaware, Lackawanna & Western Railroad, has been appointed Manager of that department in succession to Captain John M. Emery. At his own request, Captain Emery has been relieved of active duty. He has been made Consulting Marine Engineer.

Mr. Frank Rowe Potter, Superintendent of the Line, Great Western Railway, is to retire on December 31. Mr. Potter is the eldest son of the late Mr. Frank Potter, who was General Manager from 1912 to 1919. He entered the company's service on January 1, 1895, as booking clerk at West Drayton and Yiewsley station, and was transferred in May, 1897, to the London Divisional Superintendent's office, where he was employed in the train section until 1900, when to gain further station experience he went to Slough as second goods clerk. After a short period he returned to the Divisional Superintendent's office at Paddington, and remained on the staff of that office until 1907, the last four years as a relief clerk. In April, 1907, he was transferred to the staff of the Superintendent of the Line as passenger train runner, and in July, 1911, was appointed Assistant Divisional Superintendent at Plymouth. In May, 1913, he was transferred to a similar position in the London Division. On the inauguration of the Westbury Division in 1915, Mr. Potter was appointed its first Divisional Superintendent. In September, 1917, he became Divisional Superintendent, Plymouth, but returned to Paddington in January, 1922, as Divisional Superintendent. In October, 1924, however, Mr. Potter was appointed Operating Assistant to the Superintendent of the Line and in May, 1931, became General Assistant. He became Principal Assistant in January, 1933, and in August, 1936, was appointed Superintendent of the Line.

Mr. Frank Potter

Superintendent of the Line, Great Western Railway, 1936–1940

We regret to record the death at Bath, at the age of 78, of Mr. Evelyn Henry Raynward Trenow. Mr. Trenow was a pioneer in the provision of passenger transport in the Bath neighbourhood, first by his prominent part in the construction of electric tramways, and subsequently by the introduction of motorbus services. He was managing director of the Bath Electric Tramways Limited and its subsidiary the Bath Tramways & Motor Co. Ltd. until control was taken over by the Bristol Tramways & Carriage Co. Ltd. in December, 1936. He remained a Director of the two Bath companies and also joined the board of the Bristol company. All these undertakings are now, of course, associated with the G.W.R.

L.M.S.R. STAFF APPOINTMENTS

Mr. C. J. Foster, District Goods & Passenger Manager, Inverness, to be District Goods & Passenger Manager, Perth, *vice* Mr. D. W. Barrie, retiring.

Mr. A. Yeaman, Assistant, Office of Superintendent of Organisation & Staff (Motive Power), Watford, to be District Goods & Passenger Manager, Inverness.

Mr. J. E. Rigby, Goods Agent, Preston, to be Goods Agent, Manchester (Oldham Road), *vice* Mr. R. Williams, retiring.

Mr. H. Cresswell, Goods Agent, Ashton, to be Goods Agent, Preston.

Mr. C. French, Goods Agent, Trafford Park, to be Goods Agent, Ashton.

Mr. E. J. Cotton, Goods Agent, New Mills, to be Goods Agent, Trafford Park.

Mr. E. H. Homer, Goods Agent, Netherton, to be Goods Agent, Willenhall, *vice* Mr. D. F. Mustard, retired.

Mr. T. H. Martin, Goods Agent, Southend and Leigh, to be Agent, Billingsgate, *vice* Mr. J. H. Taylor, retired.

Mr. J. S. Nicholson, Stationmaster & Yard Master, Longsight, to be Station-

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master & Goods Agent, Whitchurch, *vice* C. Harding, retiring.

Mr. J. W. Collins, Stationmaster, Stirling, to be Stationmaster, Ayr, *vice* Mr. J. Toward, retiring.

Mr. D. Valentine, Stationmaster & Goods Agent, Stranraer, to be Stationmaster, Stirling.

THE ASSOCIATION OF CONSULTING ENGINEERS (INC.)

The following elections to membership are announced: Messrs. John J. C. Paterson, Richard Lionel Ray, Ralph Strick, John M. B. Stuart, and Julian S. Tritton (all of Messrs. Rendel, Palmer & Tritton).

Lord Ashfield as a Home Guard

We regret to record the death of Mr. Charles A. Langevin, formerly General Passenger Agent for the Canadian Pacific Railway at Quebec City, who died at his home on November 1, in his 51st year. Mr. Langevin joined the Canadian Pacific Railway staff in 1906 in the District Passenger offices, Montreal, and moved to Quebec in 1916 as a Passenger Agent. In 1926 he was promoted to General Passenger Agent, the position he held at the time of his death.

Dr. R. Cottier, Manager of the Third Division (Zurich), Swiss Federal Railways, since 1936, has been appointed Director of the Federal Transport Department in succession to Mr. Paul Kradolfer, who has become one of the General Managers of the Federal Railways, as recorded in our issue of September 27. The new Manager of the Third Division is Dr. Fritz Hess, who has been Secretary General at the Federal Railways headquarters since Dr. Cottier himself left that position. His successor is Mr. Francis Torche, Assistant to the Secretary General since 1936.

Railway & Other Reports

United Automobile Services Limited.—The directors of this company, which is a subsidiary of the L.N.E.R. and Tilling & British Automobile Traction Limited, are paying a dividend of 9 per cent., tax free against same on smaller capital, increased by a scrip bonus of 14⅔ per cent.

East Yorkshire Motor Services Limited.—This subsidiary of Tilling & British Automobile Traction Limited and the L.N.E.R. reports net profits to September 30, 1940, of £32,731 (against £47,429). There is placed to reserve, £10,000 (same); dividend is 8 per cent. (10 per cent.) and £14,675 (£15,944) is carried forward. Mr. G. Galley's bus service between Newcastle and Hull has been acquired.

East Kent Road Car Co. Ltd.—This subsidiary of Tilling & British Automobile Traction Limited and the Southern Railway Company reports net profits for the year to September 30, 1940, of £22,248 (against £58,214) after paying the preference dividend and placing £10,000 (same) to general reserve, there is a balance of £15,656 (against £16,407) carried forward. No dividend on ordinary (against 8 per cent.).

Midland Railway of Western Australia Limited—The directors have authorised a final payment of interest on the second mortgage cumulative income debenture stock, on account of the year ended June 30, 1940, at the rate of 3 per cent., making with the interim payment of 2 per cent., 5 per cent. for the year (same).

Bahia Blanca & North Western Railway Co. Ltd.—The board reports that the guaranteed rental of £440,000 due from the Buenos Ayres Great Southern Railway Co. Ltd., in respect of the year ended June 30, 1940, has been received, and the interest on the 4 per cent. first debenture stock (£98,000) and 4½ per cent. second debenture stock (£135,000) and the dividend on the 4½ per cent. guaranteed stock, (£207,000) have been duly paid.

Assam-Bengal Railway Co. Ltd.—The gross earnings for the year ended March 31, 1940, amounted to Rs. 2,13,34,641, an increase of Rs. 9,05,373 over 1938-39. Working expenses were higher at Rs. 1,71,51,285 by Rs. 15,10,838, so that net earnings fell from Rs. 47,88,821 to Rs. 41,83,356, increasing the working ratio from 76·56 to 80·39 per cent. Ordinary working expenses, excluding replacements and renewals and payments to worked lines, were Rs. 1,27,25,839, or 59·65 per cent. of gross earnings, as compared with Rs. 1,25,46,223, and 61·41 per cent. in 1938-39. Passenger earnings improved from Rs. 72,00,345 to Rs. 75,82,151 and goods traffic earnings from Rs. 1,17,10,388 to Rs. 1,20,21,717. No surplus profit accrued in the year under review, and the directors propose to carry forward the balance of £1,946 standing at credit of stockholders' revenue account. Guaranteed interest at the rate of 3 per cent. (less income tax) on the company's stock capital of £1,500,000 was received from the Secretary of State during the year.

Interoceanic Railway of Mexico (Acapulco to Vera Cruz).—The directors' report for 1939 states that no settlement of claims against the Mexican Government has been obtained and no compensation has been received. Therefore no revenue account or balance sheet is presented. According to adjusted returns from Mexico, operation of the Interoceanic system (which includes the lines of the Mexican Southern Railway and the Mexican Eastern Railway) resulted in a loss of 5,736,000 Mexican pesos (against loss of 5,825,000 pesos). Adding sterling charge for the company's proportion of debenture interest and working charges of Vera Cruz Terminal Company and certain interest charges, the total loss for year was £599,000 (against loss of £603,000).

Powell Duffryn Associated Collieries Limited—Dividend on the 4¾ per cent. cumulative preference stock for the half year to December 31, 1940, will be paid on January 20, 1941.

Powell Duffryn Steam Coal Co. Ltd.—Interim dividends for the year ended March 31, 1941, are: 3 per cent. less tax on preference and second preference shares; 2½ per cent. less tax on preferred ordinary stock, and 1½ per cent. less tax on ordinary stock.

Welsh Associated Collieries Limited—Dividend on the 5½ per cent. cumulative preference stock for half year to December 31, 1940, will be paid on January 31, 1941. Consideration of dividends on 4½ per cent. preferred ordinary stock and ordinary stock is postponed until after the close of the financial year.

Crompton, Parkinson Limited.—For the year to September 30, 1940, net profits were £400,514 (against £404,903), after charging additional income-tax (£24,782) arising from the retrospective effect of the last Finance Act to general reserve. The surplus over the 20 per cent. payment (same) on the ordinary stock is £105,968, which is added to the amount carried forward, making it £187,360.

Dorman Long & Co. Ltd.—Trading profit for the year to September 30, 1940, was £1,395,209 (against £1,481,395). Taxation absorbed £426,850 (£429,640) and debenture service £240,304 (£233,972); £275,000 (£300,000) was allotted against depreciation. The amount available for dividends was £425,875 (£492,081) and the preference dividend again took £238,803. Dividend on the preferred ordinary was 15 per cent. (18 per cent.) and on the ordinary 7 per cent. (10 per cent.). The amount carried forward was £156,915 (£157,501).

TRANSPORT SERVICES AND THE WAR—70

November air raid casualties—Railway vessels at St. Valery—The railway war effort in South Africa, India, and Canada—Restoration of the Warsaw electric lines—Frontiers in Eastern Europe

The Ministry of Home Security has announced that, during November, 4,588 civilians were killed and 6,202 were injured and detained in hospital as a result of air raids on the United Kingdom. The totals were divided as follow :—

	Men	Women	Children under 16	Total
Killed	2,289	1,806	493	4,588
Injured and detained in hospital	3,493	2,251	458	6,202

The number of civilians killed in October were 6,334 (see our issue of November 22, page 548), in September 6,954 (October 25, page 441), and in August 1,075 (October 25, page 441).

C.P.R. Film Propaganda

The Canadian Pacific Railway share in the Canadian war effort will be represented in part before millions in cinemas all over the North American continent in a forthcoming edition of " The March of Time." For the past several weeks two camera crews of " The March of Time " have been travelling through Canada shooting scenes for the picture on Canada's war effort. Much ground was covered by them, from a Cabinet meeting in Ottawa, presided over by the Prime Minister, Mr. Mackenzie King, to the shipment of all manner of freight by C.P.R. steamships to Great Britain. They also shot a long train of motorcars bound for Great Britain on British Government order, and pictures were made of general traffic movements at Outremont yards.

G.W.R. Vessels and the St. Valery Episode

The part played by British railway vessels in the Dunkerque evacuation has already been recorded briefly in these columns, but another episode, unfortunately not attended with the same success, has not received similar attention. It is well worthy, however, of mention among the many notable deeds of the past year, and the following details are extracted from a recent issue of the *G.W.R. Magazine*. On Sunday, June 9, two of the G.W.R. cargo boats, *Sambur* and *Roebuck*, came under requisition by the Admiralty in connection with the evacuation from St. Valery. They were kept under steam until Wednesday, June 12, when they sailed under orders for a point about 5 miles off St. Valery, where they were to contact the senior naval officer of any British warship in the vicinity, or failing that to make contact with the troops ashore. The vessels reached the appointed destination in the early morning of Thursday, June 13. When it became light enough for observation, a train-ferry vessel was seen at anchor near the shore and some French fishermen were seen but no war vessels were in sight. St. Valery itself appeared to be on fire The Master of the *Roebuck*, who speaks French, got into communication with the fishermen, who gave him the message : " Go in ; they are waiting for you." How much the fishing-boat skipper knew of the real position is uncertain, but at about 4.40 a.m., when the *Sambur* and *Roebuck* were about a mile-and-a-half from shore, batteries opened fire on both vessels, and they were under fire until 5.15. During that short time some forty or fifty shells of various sorts and calibre, probably from four-inch downwards, struck both vessels ; it is estimated that at least nine guns were operating against them. The G.W.R. vessels were skilfully handled and finally, helped by fog and smoke-clouds from fires ashore, they zig-zagged their way back to sea until they were out of range. As they had been heading shorewards at full speed when firing broke out, there was necessarily a short period when they were broadside to the enemy's batteries, and it was then that his hits were most damaging. There is little doubt that had the enemy waited another five minutes before opening fire, neither vessel would have escaped, and they would have shared the fate of the train-ferry, which must have been destroyed. Both the *Roebuck* and the *Sambur* were considerably damaged, and unfortunately there were casualties in each vessel.

South African Railways and the War

Colonel T. H. Watermeyer, the General Manager of the South African Railways & Harbours, recently gave a talk in which he outlined the important war effort of the railways. Colonel Watermeyer said :—

" Although the war has upset conditions generally, the volume of traffic handled by our railways and harbours during the past twelve months has been exceptionally heavy. At times the calls made upon us have taxed our resources, and conditions were rendered more difficult by the absence of staff on active service, but, owing to the co-operation of the public and the staff, I am pleased to say we have been able to meet the position without serious inconvenience to our customers, and we expect to continue doing so. The diversion of shipping from the Mediterranean to the Cape route has resulted in substantial activity and increased earnings in the Union ports. For the first five months of this financial year the total tonnage landed and shipped and transhipped increased by 17·23 per cent., while the total harbour earnings reached the high figure of £930,894, an increase of 19·93 per cent. compared with the corresponding period of last year. The improvement effected at the harbours during the past few years are bearing fruit in that the abnormal demands can be met. Equally, on the railways, has there been an increase of traffic, and for the same months the total tonnage conveyed was 16,667,634 tons. This, together with military traffic and the fact that normal suburban and passenger train services have been maintained, will illustrate the burden placed upon the Railway Administration.

" The total railway earnings for the period mentioned were £14,785,694. Weekly traffic earnings have been high, and on eight occasions during the present financial year record levels have been reached. The highest earnings so far in the history of the administration were railways £725,395 last week [he was speaking at the end of October.—ED. *R.G.*], and harbours £51,475 in the third week of August. The increased revenue, however, has not accrued without an increase in expenditure which, due to increased cost of stores and materials and the employment of casual staff to replace servants released for military service, is greater than would otherwise have been the case: but the pleasing feature remains that the additional expenditure has not so far been in ratio to the increased revenue, but I am not prepared to say that this will continue indefinitely. In order to conserve our financial resources and also to release as many men as possible for active service, new construction and all work which can be cut out without impairing efficiency has been stopped or curtailed.

" To a considerable extent men released have been replaced temporarily by women in certain spheres, by men not eligible for military service, and by railway pensioners who have shown their keenness to assist and have rallied to the cause. It might here be stated that the civil interests of servants released for military service are safeguarded in every respect. This, however, does not by any means represent all that has been done, for in our road motor workshops military equipment is being manufactured for the Defence Department and in our mechanical workshops various types of munitions and armour are being produced, while technicians and other skilled workers in certain other departments are engaged in making specialised instruments and equipment. In these activities one thousand members of the administration's staff are on full time employment while an additional 750 men are

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on part time employment. A further 60 men have been seconded to assist the War Supplies Department and other firms engaged on war work.

"Further, the old 1928 organisation of the Railways & Harbours Brigade has been resuscitated. The brigade provides a force embracing an operating group of trained railway operators, a composite technical group, and infantry. This force meantime is receiving military training in varying degrees to fit it for any requirements the future may hold and in the meantime the standard of physical fitness of both the older and the younger members is being raised. Already from this force 314 men have been drafted to the South African Tank Corps, and further drafts will follow from time to time. To date the summarised position of the administration's contribution to the war is the release of 5,019 men to serve with the forces, 1,750 men employed on essential war work on the home front, and 60 men seconded to assist other departments and firms outside, or a total of 6,829 servants."

War Effort of Indian Railways

Further details are now available of some of the excellent work that is being undertaken on Indian railways to further the successful prosecution of the war. It is obviously not desirable that the activities of the railways in connection with the production of munitions in railway workshops should be made public. On the Nizam's State Railway, it is understood that railway workshops are collaborating with the Public Works Department of the Nizam's Government. The Air Transport Department of the railway is providing aviation and technical training to staff which will constitute the nucleus of a flying unit. In addition, mechanic drivers are being trained in the Road Transport section for military service. The Road Service units of the Nizam's State Railway have been offered to the Government of India, if required, to relieve pressure on the Indian railways. The production of blankets for troops is an important war work of the Commerce & Industries Department of the H.E.H. the Nizam's Government.

German Currency in Luxembourg

The German foreign exchange law of December 12, 1938, and all related legislation, were made effective in Luxembourg on August 27 last by order of the German Chief of Civil Administration in Luxembourg, replacing previous legislation on the subject. As a result, all exchange restrictions on transactions between Luxembourg and Germany were removed, according to the *Deutsche Devisenerlasse* of Berlin. Reichsmark currency was introduced in Luxembourg on August 26 by another order of the same authority. This Reichsmark currency is the ordinary currency circulating in Germany. The currency previously issued in Luxembourg by the Reichskreditkassen, although expressed in Reichsmarks, is a different currency, namely, the special issue for circulation only within areas occupied by the German military forces. This special currency is not legal tender in Germany, and its importation into the Reich is prohibited.

It will be noticed that these changes closely follow the absorption of Luxembourg into the Reich which we recorded at page 184 of our August 16 issue. The German police made a "triumphal entry" into the capital of the Duchy of Luxembourg on August 6, and on August 13 it was announced by the Official German News Agency that the constitution of Luxembourg had become null and void.

Reference to the Germanisation of the railways of Luxembourg both during and before the last war was made at page 19 of our July 5 issue.

The Warsaw Electric Lines

The German Reichsbahn has repaired part of the electric suburban system round Warsaw. Before the war three sections were electrically operated, namely, Warsaw—Zyrardow, 43 km. (27 miles), Warsaw—Otwock, 28 km. (17½ miles), and Warsaw—Mazowiecki (Minsk), 36 km. (22½ miles). The first two sections have been brought into electric operation again recently. During the fighting round Warsaw, tracks, overhead equipment, substations, and signalling were practically destroyed, but the two power stations which supplied the current suffered comparatively little damage. Of the electric rolling stock, consisting of 76 multiple units and 10 locomotives, 13 units and 4 locomotives were completely destroyed, 23 units and 2 locomotives damaged beyond repair, and 40 units and 4 locomotives more or less severely damaged, but in a condition to be repaired with parts from those in the second category. For several months after the repair of the track the lines were steam-operated, but the premium put on steam rolling stock in Germany made it desirable to re-establish electric operation as far as possible with existing stock; no materials of any kind were to be supplied from Germany. After a serious decline, traffic increased again, mostly because of the movement of businesses and workers from the devastated city areas to the outskirts. It took nine months to re-establish electric operation on the Zyrardow and Otwock lines, and during that period 40 electric train units and 1 locomotive were made usable again. The greatest problem presented to the Germans was the signalling; automatic signalling had been installed on the Warsaw—Pruszkow section (20 km. or 12½ miles) of the Zyrardow line, one part British Westinghouse and the other Swedish Ericsson. These systems were quite foreign to the German engineers.

The German-Russian Frontier

A press message from Berlin, dated December 12, says that the mixed German and Russian frontier commission has now settled the demarcation of the German-Soviet frontiers in accordance with the agreement of September 28, 1939.

Finnish Railway Affairs

Through passenger traffic between Helsinki and Leningrad, which had been interrupted since the beginning of the Finnish War, was resumed on October 23. Through freight traffic is said to have been resumed on September 24 (as recorded at page 393 of our October 11 issue).

From October 1 all passenger and goods rates on the Finnish State Railways have again been increased by 10 per cent. The last increase, also by 10 per cent., was introduced from January 1, 1940. Both increases have been imposed by higher operating costs occasioned by the European war situation.

Canadian Railways Part of War Machine

The great Canadian railway systems are playing a key part in the war effort which is steadily transforming Canada into a great arsenal for the Empire. Sir Edward Beatty, President of the Canadian Pacific Railway, in a special interview with Reuters the other day, said "The outbreak of war did not find the Canadian Pacific unprepared. Its property from the Atlantic to the Pacific and its fleets on the oceans of the world have always been maintained at a high peak of efficiency. When war came, this vast and useful machine of peace was turned into a very efficient weapon of war. Broadly speaking, our part in the war effort is to provide highly efficient transport for men and goods by land and sea and to use our vast shops for the production of goods and machines, as required by the nation's expanding needs. Scattered across Canada at strategic points our shops can be used for the construction of almost any type of war material. The C.P.R. is working on the construction of tanks and is busy on other equally important work.

"The control of rail shipments, to keep them in a fluid state and avoid congestion and delay, is one of the most important problems. Fluidity is achieved by controlling shipments for export and watching closely the movement of traffic so that too many cars will not be allowed to arrive in the yards at seaboard. This means holding them at intermediate yards when necessary. Our control at shipping points is accomplished by a complicated system of permits; it has worked admirably to date. One happy instance of the gearing-up of service beyond the normal can be told. One Saturday afternoon, when the offices are usually closed, a representative of the Royal Canadian Air Force requested the shipment of certain war materials from Vancouver to Montreal in less time than it takes our crack passenger train, The Dominion, to cover the 2,881 miles. Authority was quickly obtained and the special freight train started on its way; it passed The Dominion *en route* and the goods were at the dock, ready for shipping, one hour before the passenger train reached Montreal."

RAILWAY AND OTHER MEETINGS

Central Argentine Railway Limited

The ordinary general meeting of the Central Argentine Railway Limited was held at Winchester House, Old Broad Street, London, E.C.2, on December 19. Mr. W. Howard-Williams, C.B.E., Chairman of the company, presided.

The Secretary, Mr. Ronald Leslie, having read the notice convening the meeting and the Auditors' report,

The Chairman, in moving the adoption of the report and accounts, said that he had to refer to the great loss the company had sustained by the death of Lord Abertay, known to them so long as Sir Charles Barrie, which took place on December 6. He had been a member of the board since 1930, and in addition to being a Director of the London & North Eastern Railway, he was also prominently connected with shipping, banking, insurance, and companies dealing in primary commodities.

At the meeting in November, 1939, the Chairman recalled that he had pointed out that though, up to that time, they had begun the year well, thanks to the carry over from an abundant wheat crop, new and unpredictable happenings were likely to supervene following on the state of war upon which they had then but recently entered.

By the end of December, the new wheat and linseed harvests had revealed themselves as an almost total failure: this lost the company something like £800,000. By April it was clear that the maize harvest, which was abundant, was not finding, and it had not yet found, a market in present-day Europe. Over 4,000,000 tons of it in the company's zone still awaited transport. That represented some 1¼ million pounds at the present rate of exchange in potential freights which had not yet matured and showed no sign of doing so. Finally, by the end of June, successive rises in shipping freights, war insurance, and commodity prices had so far increased the cost of stores, that coal alone, to take the largest item, had doubled its cost to the company in Buenos Aires. Hundreds of thousands of pounds would thereby be added to the bill for stores.

He need hardly remind stockholders that these three major setbacks had been superimposed upon already prevailing conditions of stress induced by fierce road and other competition, rigid labour costs and exacting regulations which left little or no scope to meet such additional unpleasant and unforeseeable contingencies.

Beyond the control of the company as these new factors were, he would ask stockholders to believe that the directors had not passively accepted them. To the British Government they had made representations as to the effect on them of the high shipping freights and the meaning both for British imports and exports if the British Argentine railway services were not effectively maintained: to the Argentine Government they had proposed remedial emergency measures and asked for an increase in rates. They still awaited the answer. On the administrative side they had reduced passenger mileage by 20 per cent. with the consent of the Argentine Authorities, had reduced stocks of every kind to the lowest dimension, substituted wood fuel (less reliable though it were) for coal where cheaper, and had taken the same course with regard to oil in lieu of coal. Though capital expenditure was involved, they had introduced diesel coaches to replace unprofitable steam trains and had obtained economy and increased receipts thereby. Posts had been suppressed, renewal work cut down or postponed, and, in general, every device for curtailing expenditure known to the railroad industry had been adopted. As a result they were able to show, despite the handicap of rising costs, a reduction in working expenses of £317,872. Seeing that this followed upon another reduction achieved in the preceding year of £227,033, expenses have been reduced in two years by over half a million. He submitted that these results, smaller though they were than the drop in receipts, were not unsatisfactory when it was remembered how large a proportion of the company's outgoings was a fixed quantity and that they had to maintain a railway designed to carry far heavier traffics than had this year materialised.

Despite these efforts, however, the situation, for the causes he had outlined, had become such that the directors at the close of the financial year, after a careful review, felt that they had no option but to take the steps necessary to obtain a moratorium. These were given effect to at meetings held on October 29 last. It was with great regret that they had to take this action for the first time in the seventy years of the company's history.

As to the future, this was no time for prophecy. Too many conflicting factors were at work and the result of their interplay could not yet be foreseen. The latest reports stated that there was now every prospect of a good harvest of wheat and linseed. Whether and to what extent the former would be exported was another matter. Argentine economy generally, though basically sound, was naturally affected by the country's present difficulties in marketing its products and the effects might be far-reaching. It was believed that, in the Argentine, as in other countries, one result of the war was to demonstrate what a vital element of national prosperity well administered railways continued to be. But in the Argentine, as elsewhere, if they were to continue to function satisfactorily, realistic consideration for their present difficulties, not of their own making, had to be given by the authorities.

As long ago as 1935, he had sounded a warning note on this subject, though he believed he had raised some criticism at the time thereby. Yet he thought it was only common sense to contend that railways could not go on shouldering increasing burdens, often to afford relief to other industries, and still manage to give unimpaired services. There was a limit to what capable administration could do in the way of overcoming handicaps. He feared that, failing effective Government co-operation, that limit had been about reached.

The latest information stated that the harvesting of wheat and linseed now proceeding showed that good average crops might be expected. The Argentine Government was buying these cereals at fixed prices, so that some revival of the traffics therefrom may be expected in January. Greater commercial activity with gradual benefit to railway revenues should result. As to maize, a prospective barter arrangement with Spain might lead to some slight improvement.

Mr. W. K. Whigham seconded the resolution, which was carried.

Sir W. Guy Granet, G.B.E., and Mr. C. H. Pearson were re-elected to the board and the Auditors were re-appointed. The proceedings closed with a vote of thanks to the chairman, directors, and staff.

The British Railway Stockholders' Union Limited

The annual general meeting of the British Railway Stockholders' Union Limited was held on December 13 in Caxton Hall, Westminster, S.W.1.

Sir Charles Stuart-Williams, Chairman of the Council, who presided, said that the blackout, which formed so prominent and unpleasant a part of daily life, extended to many aspects of railway working. It was known in a general way that all the lines were struggling with heavily increased traffic, both passenger and goods, and that they were working under abnormal conditions, such as the loss of large numbers of the trained staff, unusual and frequently changed incidence and routing of traffic, not to mention bombs, blackout and other afflictions. It was only fair to the railway staffs to record appreciation of the splendid way in which, despite all these difficulties, the nation's transport was being maintained.

Members would have seen in the press much comment upon the recent sittings of the tribunal which considered the Railway Executive Committee's application for an increase of fares and freights and especially the frequent comments on what is called the "vicious spiral of inflation." So far, he had neither seen nor heard of

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any reason why this argument should be so readily and widely applied only to railway charges. It was true that passenger fares and freight charges entered into the cost of most things, though to a much smaller degree than was generally supposed.

Thus, for machinery, the cost of a 70 mile haul was only 0·9 per cent. of its export value; for cotton goods, a haul of 100 miles represented 0·34 per cent. of its value; and for boots and shoes a similar haul meant 0·39 per cent. Even for shipment coal, the figures based on actual average haul was only 9·2 per cent., for pig-iron 4·2 per cent., and for iron and steel 1·83 per cent.

All these figures were based on actual haulage distances and were the results of a careful calculation made some years ago. Yet when a cut and dried agreement with the Government stipulated that admitted increase in cost of working should be met by some increase in charges, a universal outcry arose of inflation. No such outcry attended more substantial rises in the cost of coal, of iron and steel or pig-iron. Why pick on railway charges especially when the amount of their increase was 16½ per cent. at the most, compared with percentages of from 24 to 64 per cent. for iron and steel.

Within a year of the outbreak of war, the wages bill of British railway companies had increased by well over £12,000,000 a year. Including overtime and other special payments, the labour costs of the companies were about £15,000,000 higher and yet on November 20, 1940, the three railway trade unions had met to formulate another all-round increase in wages.

This last demand seemed definitely to raise certain points of principle. There was the important fact that railway wages could not be considered and settled as though railways were operating in an economic vacuum and as though increases given to railwaymen had no effect on other classes of operatives. The financial position of railways did differ from that of all other industrial corporations by virtue of the special agreement with the Government of February last, but since any substantial increase would now almost certainly fall upon Government because of the guaranteed minimum net revenue, there seemed little real difference between them and an industrial company. Further increases in working expenditure merely diminished the amount payable to Government as Excess Profits Tax and so fell indirectly on the State. All increases from now on seemed to involve further payments by the whole community to the bodies of operatives concerned in the demands. The question had to be faced—when was this going to stop, and what would be the effect on our national life taken as a whole, and including that even more important part of our manhood and womanhood which was engaged in military, naval, air force, and civil defence?

Questions in Parliament

Coal Traffic

Mr. F. S. Cocks (Broxtowe—Lab.), on December 3, asked the Secretary for Mines how many thousand wagons laden with coal, originally intended for export, were standing idle on railway sidings; and whether steps could be taken to empty these trucks so that they might be used to transport coal from the pitheads.

Mr. David Grenfell (Secretary for Mines) said that approximately 3,000 wagons of coal originally intended for export, were standing at docks in South Wales. He had no information of a similar accumulation in any other area. An officer of his Department had already made arrangements for the disposal of over 2,000 of these wagons; steps were being taken to arrange for the disposal of the remainder.

Mr. S. S. Hammersley (Willesden East—C.), on December 11, asked the Minister of Transport if he would favourably consider the suggestion that all ordinary passenger transport should be completely stopped on one Sunday in order to free congested coal traffic.

Lt.-Colonel Moore-Brabazon, in a written reply, stated: Such a step as envisaged is constantly receiving consideration.

Mr. D. L. Lipson (Cheltenham—Ind.), on December 12, asked the Minister of Transport if he would consider using for the transport of coal the 150 extra trains he was proposing to put on to deal with Christmas parcels.

Lt.-Colonel Moore-Brabazon wrote in reply: Any additional trains which may be needed to carry Christmas parcels traffic will not be at the expense of or alternative to freight traffic.

Facilities for Visits to Evacuees

Mr. D. Chater (Bethnal Green North-east—Lab.), on December 5, asked the Minister of Transport (1) whether, in view of the traffic delays which lengthened the time occupied in travelling, he would arrange that the vouchers issued to the parents and husbands of evacuees for one day only should be extended to two days, and for long distances the present two-day voucher should be available for three days; (2) whether he would take steps for the removal of the restriction to Tuesday, Wednesday, and Thursday of travel vouchers on the Great Western Railway issued to visitors to evacuees; and (3) whether he would take steps to ensure that, when a new reception area was opened, the names of the places therein to which travel vouchers for visiting evacuees were issued, should be more promptly included in the list of registrars, in order to avoid the period between evacuation and the initial visit being unduly prolonged.

Lt.-Colonel J. T. C. Moore-Brabazon (Minister of Transport) in a written reply stated that arrangements were being made by which cheap facilities for visits to evacuees would be available to any place to which evacuees had gone from a declared evacuation area. Certain safeguards would have to be introduced to ensure that the facilities were confined to those entitled to them. Formalities would be kept to a minimum. The period of validity of the cheap tickets would be extended to three days where necessary. The restriction on travel on the G.W.R. system was being removed, and the tickets at the cheap rate would be available for travel on any day. These facilities might have to be withdrawn if circumstances required at any time. The special cheap facilities would be available at Christmas.

Home Guards and Free Travel

Mr. F. S. Cocks (Broxtowe—Lab.), on December 10, asked the Secretary of State for War whether members of the Home Guard could be given free travel by train, tramcar, or bus on production of passes indicating that they were travelling for a specific duty.

Mr. R. A. Eden (Secretary of State for War): Members of the Home Guard travelling on duty for distances over two miles are given free travel by train, tramcar, or bus. Normally, warrants for the journey are issued, but, in the case of those bus companies which do not accept warrants, payment is made by the man himself, and he is reimbursed from public funds.

Contracts and Tenders

The South Indian Railway Company has placed the following contracts to the inspection of Messrs. Robert White & Partners :—

J. Stone & Co. Ltd.: 745 positive sections for train lighting cells.
Alfred Wiseman & Co. Ltd.: 4 transmission rims and 24 spur gears for rack engines.

The Bengal-Nagpur Railway Co. Ltd. has placed the following orders with the concerns mentioned :—

Wire rope: British Ropes Limited.
3 cranked axles: Steel, Peech & Tozer Limited.
Aquacidox boiler tubes: Howell & Co. Ltd.
Drop stamp dies: Thos. Firth & John Brown Limited.
Wheels and axles: John Baker & Bessemer Limited.
61 steel axles: Taylor Bros. & Co. Ltd.
Cast steel skeleton wheels: North British Locomotive Co. Ltd.
250 steel tyres: Taylor Bros. & Co. Ltd.

The Bombay, Baroda & Central India Railway Company has placed the following orders to the inspection of Messrs. Rendel, Palmer & Tritton :—

700 steel axles: Taylor Bros. & Co. Ltd.
396 steel axles: Taylor Bros. & Co. Ltd.
460 steel tyres: Steel Co. of Scotland Ltd.
792 steel tyres: Taylor Bros. & Co. Ltd.
80 discwheel centres: Owen & Dyson Limited.

The South African Railways & Harbours Administration is calling for tenders for 4-cylinder-engined industrial type tractors with pneumatic tyre equipment. Tenders should reach the Secretary to the Tender Board, Room 31, South African Railways & Harbours Administration Headquarter Offices, or P.O. Box 7784, Johannesburg, by 1 p.m. on January 6, 1941.

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